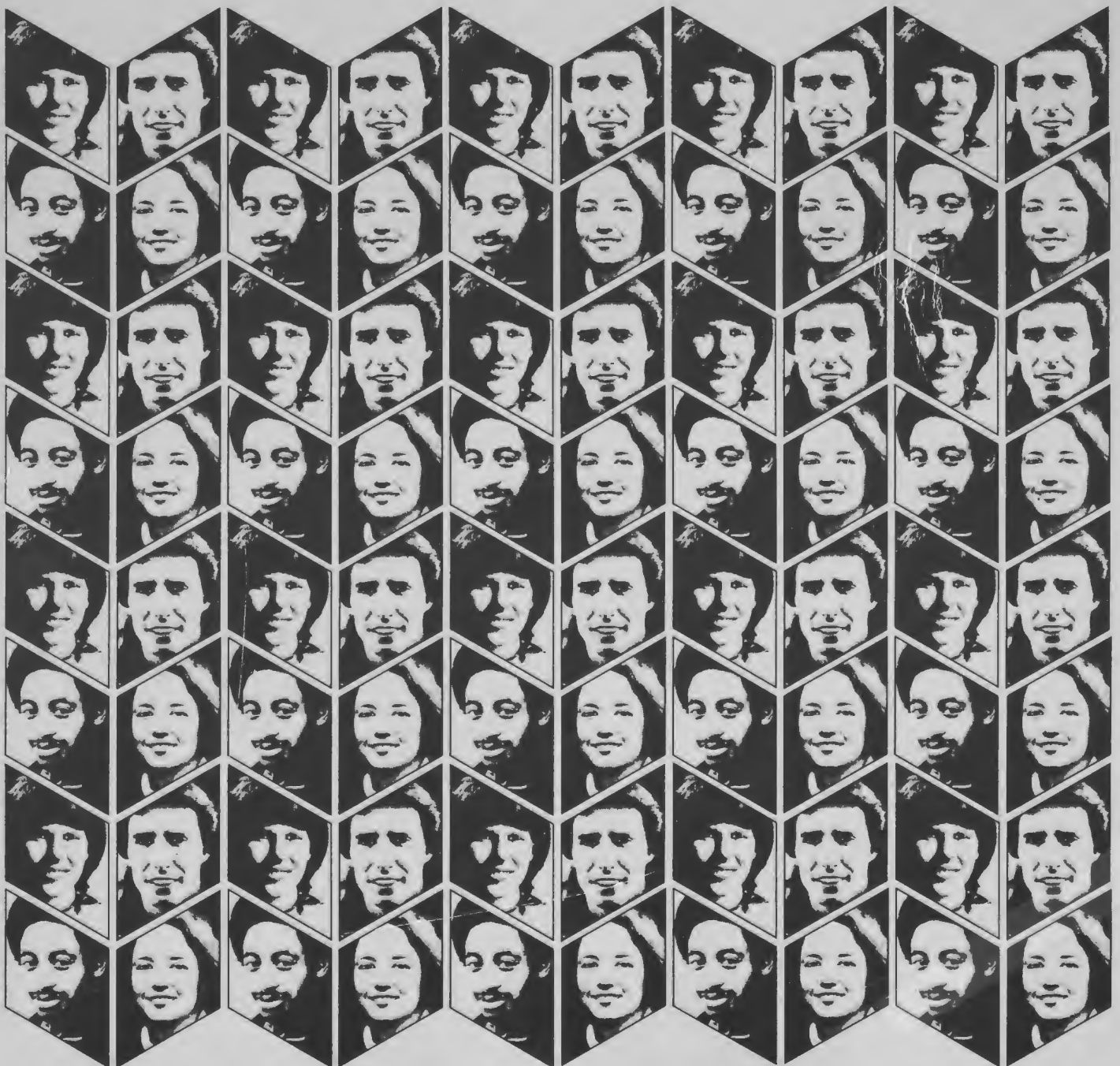


Jessie



1985-86 Bulletin of The University of Rhode Island

Undergraduate Studies



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1985-86 Calendar

First Semester

August 26–September 14

Registration period, College of Continuing Education (CCE)

September 2, Monday
Holiday, Labor Day

September 3, Tuesday
Kingston campus registration, 8 am–5 pm

September 4, Wednesday
Classes begin, Kingston campus—8 am
University Faculty Meeting, 3:30 pm

September 9, Monday
Classes begin, CCE

September 13, Friday
Final day for students to drop "Early Drop" courses

September 17, Tuesday
Final day for students to add courses and to add P/F grading option
Kingston campus fees will not be adjusted downward for courses dropped after this date

September 18, Wednesday
Final day for undergraduates to drop CCE courses designated "Early Drop"

September 20, Friday
Final day for students to add CCE courses and to add P/F grading option for CCE courses

October 8, Tuesday
Final day for undergraduates to drop Kingston campus courses

October 11, Friday
Final day for undergraduates to drop CCE courses

October 14, Monday
Holiday, Columbus Day

October 22, Tuesday
Mid-semester, Kingston campus
Final day for all students to change from P/F option to grade for Kingston campus courses

October 28, Monday
Mid-semester, CCE
Final day for all students to change from P/F option to grade for CCE courses

October 28–November 1
Preregistration for spring semester

November 11, Monday
Holiday, Veterans' Day

November 13, Wednesday
Monday classes meet

November 14, Thursday
University Faculty Meeting, 3:30 pm

November 28, Thursday
Thanksgiving recess begins, 8 am

December 2, Monday
Classes resume, 8 am

December 11, Wednesday
Classes end, Kingston campus

December 12, 14, 15
Reading days, Kingston campus

December 13, 16–20
Final examinations, Kingston campus

December 21, Saturday
CCE classes, examinations end

December 23, Monday
Final grades due in Registrar's Office, 4 pm

Second Semester

January 6–18
Registration period, College of Continuing Education (CCE)

January 13, Monday
Kingston campus registration, 8 am–5 pm

January 14, Tuesday
Classes begin, Kingston campus—8 am;
CCE—9 am

January 15, Wednesday
University Faculty Meeting, 3:30 pm

January 20, Monday
Holiday, Martin Luther King's Birthday

January 22, Wednesday
Monday classes meet

January 24, Friday
Final day for students to drop "Early Drop" courses

January 28, Tuesday
Final day for students to add courses and to add P/F grading option
Fees will not be adjusted downward for courses dropped after this date

February 17, Monday
Holiday, Washington's Birthday

February 18, Tuesday
Monday classes meet

February 19, Wednesday
Final day for students to drop courses

March 5, Wednesday
Mid-semester. Final day for students to change from P/F option to grade

March 10, Monday
Spring recess begins, 8 am

March 17, Monday
Classes resume, 8 am

March 24–28
Preregistration for fall semester, Kingston campus only

April 29, Tuesday
University Faculty Meeting, 3:30 pm

April 30, Wednesday
Classes end, Kingston campus

May 1, 3, 4
Reading days, Kingston campus

May 2, 5–9
Final examinations, Kingston campus

May 10, Saturday
CCE classes, examinations end

May 12, Monday
Final grades due in Registrar's Office, 4 pm

May 25, Sunday
Commencement

Summer Session 1986

June 9–July 11
First five-week session

July 14–August 15
Second five-week session

Changes in the academic calendar due to major storms, labor unrest, or other circumstances, may be made when it is in the best interest of the institution, and without prior notice to the students.

The University



The University of Rhode Island is a medium-sized state university in the southern part of Rhode Island in the village of Kingston. In part because of its unique location near the ocean and six miles from Narragansett Bay, the University has developed strong marine programs and has been designated one of the national Sea Grant colleges. As a land-grant college since its founding in 1892, it emphasizes preparation for earning a living and for responsible citizenship, carries on research, and takes its expertise to the community in extension programs.

The University enrolls about 11,000 students on its Kingston campus and another 3,000 in credit courses throughout the state. About half of the 11,000 undergraduates are resident students; there are about 2,500 graduate students, and a full-time teaching faculty of about 750.

The Campus. The University has a spacious country campus 30 miles south of Providence in the northeastern metropolitan corridor between New York and Boston. The center of campus is a quadrangle of handsome old granite buildings surrounded by other newer academic buildings, student residence halls, and fraternity and sorority houses. On the plain below Kingston Hill are gymnasiums, athletic fields, tennis courts, a freshwater pond, agricultural fields, and greenhouses.

In addition to the Kingston campus, the University has three other campuses.

The 165-acre Narragansett Bay Campus, six miles to the east overlooking the west passage of the Narragansett Bay, is the site of the Graduate School of Oceanography. The Rhode Island Atomic Reactor and several federal laboratories devoted to marine sciences are also located there. The College of Continuing Education has a building in downtown Providence. In the western section of the state, 20 miles from Kingston, is the W. Alton Jones Campus. Its 2,300 acres of woods, fields, streams, and ponds is the site of environmental education, research, and conference facilities.

History. The University had its beginning in the state agricultural school chartered in 1888. The Oliver Watson farm was purchased as a site for the school, and the old farmhouse, now restored, still stands on the campus. The school became the Rhode Island College of Agriculture and Mechanic Arts in 1892, and the first class of 17 members was graduated two years later.

The Morrill Act of 1862 provided for the sale of public lands, the income from which was to be used to create at least one college in each state with the principal purpose of teaching agriculture and mechanic arts. From this grant of land comes the name land-grant applied to the national system of state colleges and, in a later adaptation of the concept, federal funds given to colleges for marine research and extension are called sea grants.

In 1909 the name of the college was

changed to Rhode Island State College, and the program of study was revised and expanded. In 1951 the college became the University of Rhode Island by act of the General Assembly. The Board of Governors for Higher Education appointed by the governor became the governing body for the University in 1981. A historical outline may be found in the appendix.

Programs of Study

Undergraduate Study. All programs aim at a balance of studies of the natural and social sciences, the humanities, and professional subjects. The courses and programs of study have been approved by national accrediting agencies and are accepted for credit by other approved institutions of higher education (see Programs and Requirements).

Undergraduate students may earn the following degrees:

- Bachelor of Arts
- Bachelor of Science
- Bachelor of Fine Arts
- Bachelor of Music
- Associate in Science in dental hygiene or in fisheries and marine technology (two-year programs)
- Bachelor of General Studies (College of Continuing Education only)

All freshmen who enter the University to earn a bachelor's degree are first enrolled in University College (see page 28).

Undergraduate Degrees

College of Arts and Sciences

Anthropology: B.A.
 Art: B.A., B.F.A.
 Biology: B.A.
 Botany: B.S.
 Chemistry: B.A., B.S.
 Classical Studies: B.A.
 Comparative Literature Studies: B.A.
 Computer Science: B.S.
 Dental Hygiene: (four years) B.S.,
 (two years) A.S.
 Economics: B.A.
 English: B.A.
 French: B.A.
 Geography and Marine Affairs: B.A.
 Geology: B.A., B.S.
 German: B.A.
 History: B.A.
 Italian: B.A.
 Journalism: B.A.
 Latin American Studies: B.A.
 Linguistics: B.A.
 Mathematics: B.A., B.S.
 Medical Technology: B.S.
 Microbiology: B.S.
 Music: B.A., B. Mus.
 Philosophy: B.A.
 Physics: B.A., B.S.
 Political Science: B.A.
 Psychology: B.A.
 Russian: B.A.
 Sociology: B.A.
 Spanish: B.A.
 Speech Communication: B.A.
 Theatre: B.A., B.F.A.
 Urban Affairs: B.A.
 Women's Studies: B.A.
 Zoology: B.S.

College of Business Administration

Accounting: B.S.
 Finance: B.S.
 General Business Administration: B.S.
 Insurance: B.S.
 Management: B.S.
 Management Information Systems: B.S.
 Management Science: B.S.
 Marketing: B.S.
 Personnel Management: B.S.
 Production and Operations Management:
 B.S.

College of Engineering

Biomedical Electronics Engineering: B.S.
 Chemical Engineering: B.S.
 Chemical and Ocean Engineering: B.S.
 Civil Engineering: B.S.
 Computer Electronics Engineering: B.S.
 Electrical Engineering: B.S.
 Industrial Engineering: B.S.
 Mechanical Engineering: B.S.

College of Continuing Education

Bachelor of General Studies: B.G.S.

College of Human Science and Services

Communicative Disorders: B.S.
 Consumer Affairs: B.S.
 Education: (elementary and secondary) B.S.
 General Home Economics: B.S.
 Home Economics Education: B.S.
 Human Development and Family Studies: B.S.
 Human Science and Services: B.S.
 Physical Education, Health, and Recreation: B.S.
 Textiles, Fashion Merchandising and Design: B.S.
 Textile Marketing: B.S.
 Urban Affairs: B.S.

College of Nursing

Nursing: B.S., Ph.D.

College of Pharmacy

Pharmacy: (five years) B.S.
 Respiratory Therapy: B.S.

College of Resource Development

Animal Science and Technology: B.S.
 Aquaculture and Fishery Technology: B.S.
 Fisheries and Marine Technology:
 (two years) A.S.
 Food Science and Nutrition: B.S.
 Natural Resources: B.S.
 Plant Science and Technology: B.S.
 Urban Affairs: B.S.

Graduate Degrees

Accounting: M.S.
 Animal Pathology: M.S.
 Animal Science: M.S.
 Applied Mathematical Sciences: Ph.D.

- Applied Mathematics
 - Computer Science
 - Operations Research
 - Statistics
 - Applied Probability
- Biochemistry-Biophysics: M.S.
 Biological Sciences: M.S., Ph.D.
- Animal Pathology
 - Biochemistry-Biophysics
 - Botany
 - Food Science and Nutrition
 - Microbiology
 - Plant Pathology
 - Resource Chemistry
 - Zoology

Botany: M.S.
 Business Administration: M.B.A.
 Chemical Engineering: M.S., Ph.D.
 Chemistry: M.S., Ph.D.
 Civil and Environmental Engineering:
 M.S., Ph.D.
 Community Planning: M.C.P.
 Comparative Literature: M.A.
 Computer Science: M.S.
 Doctor of Pharmacy: Pharm.D.
 Economics: M.A.
 Economics-Marine Resources: Ph.D.

Education: M.A.

- Education Research
 - Elementary Education
 - Guidance and Counseling
 - Reading Education
 - Science Education
 - Secondary Education
 - Youth and Adult Education
- Electrical Engineering: M.S., Ph.D.
 • Biomedical Engineering
 English: M.A., Ph.D.
 Environmental Health Science: M.S.
 Food Science and Nutrition: M.S.
 French: M.A.
 Geography: M.A.
 Geology: M.S.
 History: M.A.
 Home Economics Education: M.S.
 Human Development, Counseling and
 Family Studies: M.S.
 • Child Development and Family Relations
 • Counseling and Guidance
 • Marriage and Family Counseling
 Industrial Engineering: M.S.
 Labor Studies and Labor Relations: M.S.
 Library and Information Studies: M.L.I.S.
 Marine Affairs: M.A., M.M.A.
 Mathematics: M.S., Ph.D.
 Mechanical Engineering and Applied
 Mechanics: M.S., Ph.D.
 Medicinal Chemistry: M.S.
 Microbiology: M.S.
 Music: M.M.
 Nursing: M.S.
 Ocean Engineering: M.S., Ph.D.
 Oceanography: M.S., Ph.D.
 Pharmaceutical Sciences: Ph.D.
- Medicinal Chemistry
 - Pharmacognosy
 - Pharmacology and Toxicology
 - Pharmaceutics
- Pharmacognosy: M.S.
 Pharmacology and Toxicology: M.S.
 Pharmaceutics: M.S.
 Pharmacy Administration: M.S.
 Philosophy: M.A.
 Physical Education: M.S.
 Physics: M.S., Ph.D.
 Plant Pathology-Entomology: M.S.
 Plant Science: M.S.
 Political Science: M.A.
 • International Relations
 Psychology (School): M.S., Ph.D.
 Psychology: Ph.D.
- Clinical
 - General Experimental
- Public Administration: M.P.A.
 Resource Chemistry: M.S.
 Resource Economics: M.S.
 Sociology: M.A.
 Spanish: M.A.
 Speech-Language Pathology and
 Audiology: M.A., M.S.
 Statistics: M.S.
 Textiles, Clothing and Related Art: M.S.
 Zoology: M.S.

Undergraduates have a wide choice of programs from which to choose a concentration, and the advising program in University College provides help in making this decision and in choosing appropriate courses.

The programs listed on the previous page are presented in detail in chapters describing the individual colleges. Interdepartmental curriculums and areas of interest are detailed in the chapter on University Programs and Requirements.

Graduate Study. Study at the graduate level leads to the master's degree in over 60 areas of study and the degree of Doctor of Philosophy in 24. Students may earn the following degrees:

- Master of Arts
- Master of Science
- Master of Business Administration
- Master of Community Planning
- Master of Library and Information Studies
- Master of Marine Affairs
- Master of Music
- Master of Public Administration
- Doctor of Pharmacy
- Doctor of Philosophy

Graduate School. Students holding the baccalaureate degree from this University or from another having equivalent requirements may be admitted for graduate study, providing that their credentials meet the standards set by the Graduate School and by the department in which they wish to study, and that facilities for study are available in their field of interest. Among the standards required for full status admission are an undergraduate average approximating B or better and satisfactory scores on a nationally administered examination. Applicants with somewhat lower undergraduate averages but high examination scores may also be admitted in individual cases.

Within each college's chapter in this bulletin, the related graduate degrees are listed. A *Graduate Bulletin*, containing complete information on graduate study and application forms, is available from the Dean of the Graduate School, The University of Rhode Island, Kingston, RI 02881-0807. Further information may be requested from the chairperson of the appropriate department. Applications are returned to the Dean of the Graduate School.

Each applicant must submit (1) completed application forms in duplicate with a \$15 nonrefundable application fee

(check or money order payable to the University of Rhode Island); (2) three letters of recommendation from individuals familiar with the applicant's work, preferably in the field for which he or she is applying; (3) two copies of an official transcript sent directly from each college or university attended; and (4) scores from the Graduate Record Examination aptitude tests. See the *Graduate School Bulletin* for those programs which require the GRE advanced tests or which require a different national test.

Applicants from foreign countries must complete the Test of English as a Foreign Language (TOEFL) with minimum scores of 500 for science students and 550 for non-science students. All inquiries from international students concerning applications, fees, housing, etc., should be directed to the Office of International Student Affairs.

The usual deadlines for receipt of applications are April 15 for September and Summer Session admission, and November 15 for February admission. See the *Graduate School Bulletin* for those programs which have earlier application deadlines.

The Graduate School of Library and Information Studies on the main campus offers study leading to the Master of Library and Information Studies degree. Students in undergraduate and other graduate programs may, with the approval of their adviser, enroll in library courses that relate to their studies.

The Graduate School of Oceanography on the Narragansett Bay Campus, six miles from Kingston, offers study leading to the Master of Science and Doctor of Philosophy degrees in the areas of biological, chemical, geological, and physical oceanography. Interested undergraduates may take a 400-level general survey course qualifying for General Education credits as well as certain 500-level courses in the oceanography core curriculum. In addition, qualified undergraduates are eligible for a 400-level, semester-long, full-time program of laboratory and field research working with faculty of the Graduate School of Oceanography. Insofar as possible, the program is tailored to the interests of the student and can range from deep-sea geology to coastal zone planning.

The 165-acre Narragansett Bay Campus borders the shore and includes a basin and dock within easy reach of both the Bay and the open ocean. The University

operates several vessels, the largest of which is a 177-foot ocean-going research ship, *Endeavor*.

A number of buildings make up the Bay campus and include a quadrangle of laboratories, offices, and the Pell Marine Science Library; a 12,000-square-foot research aquarium; a towing test tank; and a specially designed facility which permits moderate-scale controlled ecosystems experiments.

Academic Services

The University Libraries. The University's library collection of 813,694 bound volumes and 873,964 volume-equivalent microforms is housed in the University Library in Kingston, at the College of Continuing Education in Providence, and in the Claiborne Pell Marine Science Library on the Narragansett Bay Campus. The latter was designated the National Sea Grant Depository in 1971.

The University Library, which holds the bulk of the collection, has open stacks which provide direct access to books, periodicals, documents, maps, microforms, and audiovisual materials. The Special Collections Department collects and maintains rare books, manuscripts, the University archives, and a variety of special interest materials. Service hours at the other libraries vary, but the University Library provides full reference, bibliographic, and circulation services during most of the 90 hours a week it is open. Terminals linked to the Academic Computer Center are available in the Library during the hours both facilities are open.

The Academic Computer Center. The Academic Computer Center has a National Advanced System (NAS) 7000N mainframe computer (IBM compatible) and two Prime 850 super minicomputers. Over 350 interactive terminals may be attached simultaneously to these systems. Access to Academic Computer Center facilities as well as to remote independent computers is provided by a MICOM port selector. The mainframe uses IBM's OS/MVS operating system providing batch processing as well as full function time sharing through TSO. The minicomputers provide interactive research and instructional computing using the PRIMOS operating system. Both systems have a full complement of programming.

languages and packages. The center has a CALCOMP 1051/906 plotter with extensive display and preview facilities for hard copy graphics output. Graphics software packages include SYMAP, SYMVU, CALFORM, ASPEX, SAS/GRAPH, and FORTRAN callable subroutines. Interactive graphic facilities using Tektronix color graphics terminals are provided. Various types of hard copy and video display terminals for interactive use or remote job entry are located on the campus in most of the science and engineering departments as well as the College of Business Administration, the College of Continuing Education, the College of Pharmacy, the University Library, and the Graduate School of Oceanography. Two computer classrooms, each with 20 terminals, are available. The Dennis Callahan Microcomputer Laboratory in the College of Business Administration provides public-access microcomputer facilities.

The staff develops and maintains programming systems and application programs, conducts short courses and workshops, prepares user documentation, and provides consultation on the facilities and their use. They also provide assistance in the purchase, rental, maintenance, and installation of personal computers and telecommunications equipment.

Research and Extension

Within the state system of higher education, the University has the major responsibility for graduate education which is interdependent with a strong program of research. There are active research programs in almost all departments of the University, and in 1983-84 funds for research totalled \$25,000,000. Support comes from foundations, commercial firms, federal and state governments, and the University. Applications for research grants are signed by the University's Coordinator of Research who is the liaison officer for the president, the business manager, the academic deans, the Research Committee, and the faculty in matters pertaining to general research policy.

In addition to research conducted in the various departments, the University has established a number of research and extension programs in specially defined

areas; these are described in detail in the Appendix.

The University distributes the results of its research in publications available to the public. These include a series of marine bulletins, technical reports, and Cooperative Extension and Agricultural Experiment Station bulletins.

The University also publishes through the *University Press of New England*, of which it is a member. Manuscripts originating on the seven member campuses and elsewhere are published as determined by the director and the editorial board on which the University is represented.

The University Community

In addition to the student body, the University community is made up of faculty, administration, staff, and alumni. The *Faculty Senate* represents the faculty and was authorized in 1960 by the general faculty to conduct the business assigned to the faculty by law or by the Board of Governors for Higher Education. The *Graduate Council* is the representative body for the graduate faculty and determines the academic policies for graduate study. The office of *University Ombudsman* investigates complaints from students, faculty, and administrative personnel that they have been unfairly dealt with in the normal channels of administrative process. The ombudsman is a tenured member of the faculty, elected by the general faculty, and is assisted by a student nominated by the Student Senate and appointed by the president.

The *Instructional Development Program* exists to assist the faculty in its teaching responsibilities. Workshops, colloquiums, and seminars, as well as personal consultations, assist faculty interested in increasing their teaching effectiveness.

The voice of the alumni is heard through the *Alumni Association* which includes all those who have attended the University for two semesters or more and whose class has graduated. The organization, with about 55,000 members, promotes the interests of the University and maintains the ties of alumni with their alma mater through programs, services, and the publication of a bulletin. An annual fund drive provides scholarship and other University aid.

The University receives less than half of its support from the state. The balance

comes from student fees and tuition, federal grants, and auxiliary enterprises and other miscellaneous sources. The *University of Rhode Island Foundation* encourages and administers gifts from private sources to build a substantial endowment for continuing support of the University. It is concerned with the support of University activities for which adequate provision is not ordinarily made by appropriations from public funds.

Affirmative Action and Non-Discrimination. The University of Rhode Island prohibits discrimination on the basis of race, sex, religion, age, color, creed, national origin, or handicap and discrimination against disabled and Vietnam era veterans in the recruitment, admission, or treatment of students, the recruitment, hiring or treatment of faculty and staff, and the operation of its activities and programs. This is in compliance with state and federal laws, including Titles VI and VII of the Civil Rights Act of 1964 as amended, Title IX of the 1972 Education Amendments to the Higher Education Act, Executive Order 11246, as amended, Sections 503/504 of the Rehabilitation Act of 1973, and Section 402 of the Vietnam Era Readjustment Assistance Act of 1974.

Most buildings on campus are architecturally available to the handicapped (see map on page 194) and provision is made to insure that no student is prevented from pursuing a course of study because of restricted access to buildings.

Inquiries concerning compliance with antidiscrimination laws should be addressed to the Affirmative Action Officer, President's Office, Administration Bldg., tel. 792-2442; or to the Director, Office for Civil Rights, Department of Education, Region I. Questions regarding provisions for the handicapped should be directed to the Coordinator of Handicapped Services in the Office of Student Life, 332 Memorial Union, tel. 792-2101.

Programs and Requirements



Consistent with its policy of allowing the greatest latitude possible in course selection, the University offers a wide choice to fill its general education requirements and encourages students to select free electives that cross departmental and college lines. This section deals with academic requirements, regulations, and opportunities that are University-wide rather than college-related.

The University attempts to provide the successful student with a range of knowledge and skills which can, with appropriate motivation and initiative, be used in a variety of ways after graduation. Study options vary from the traditional liberal education to programs which are heavily vocationally oriented. Successful completion of any course of study at the University, however, does not guarantee that the student will find either a specific kind or level of employment.

Students interested in the career opportunities related to particular programs of study are encouraged to consult University College advisers, the appropriate department chairperson, and/or the staff of the Office of Career Services. For students who are uncertain about their career choices, the Counseling Center offers help.

The University administration may alter, abridge or eliminate courses and programs of study. While every effort is made to keep this catalog current, not all courses and programs of study listed may be available at the time of student's matriculation. Similarly, course and pro-

gram requirements may be changed from time to time. In all cases every effort will be made to accommodate individual students whose exceptional circumstances may make it difficult or impossible to meet the changed requirements. Changes in the academic calendar may also be made when deemed to be in the best interest of the institution.

Accreditation. The courses and programs of study offered by the University of Rhode Island have been approved by national accrediting agencies and are accepted for credit toward college degrees by other approved institutions of higher learning. The national accrediting agencies which have approved the quality of the course offerings of the University of Rhode Island include the American Association of Universities, the American Assembly of Collegiate Schools of Business, the American Chemical Society, the American Council on Pharmaceutical Education, the American Dental Association (Council on Dental Education), the American Library Association, the American Psychological Association, the American Society of Journalism School Administrators, the Accreditation Board for Engineering and Technology, the National Association of Schools of Music, the National League for Nursing, the New England Association of Colleges and Secondary Schools, and the State University of New York.

The University is also an approved member institution of the American Association of University Women, the

Council of Graduate Schools in the United States, the North American Association of Summer Sessions, and the National University Extension Association.

General Education Requirements

These requirements apply to entering freshmen beginning in the fall of 1981, and transfer students who entered in the fall of 1981 with fewer than 16 transferrable credits. Students who entered prior to fall 1981 must follow the General Education requirements outlined in the Undergraduate Bulletin for 1980-81 or the year in which they matriculated at the University.

The University of Rhode Island believes that all undergraduate students, regardless of their degree program, need experience in the study of fundamentals which builds upon the student's previous education and continues to be advanced through the undergraduate years and beyond. Thus, all bachelor's degree students follow the same University-wide General Education requirements.

General Education is that part of the undergraduate curriculum in which students explore a broad spectrum of intellectual subjects, approaches, and perspectives. The General Education component of the curriculum aims to help accomplish these three goals: (1) develop further the essential English communi-

cation abilities upon which advanced studies depend; (2) offer experience in five broad subject areas: fine arts and literature, letters, mathematics, natural sciences, and social sciences; and (3) expose the student to a foreign language or culture.

The General Education program is divided into the following components which correspond to these goals:

English Communication. 6 credits in English communication, at least 3 of which must be in a course designed specifically to improve written communication skills;

Fine Arts and Literature. 6 credits in courses related to historical and critical study of the arts and literature as well as creative activity;

Foreign Language or Culture. 6 credits or the equivalent in a foreign language or foreign culture;

Letters. 6 credits in courses which address fundamental questions about the human condition, human values, and ways of communicating these values;

Mathematics. 3 credits in a course specifically designed to provide training in college-level quantitative skills and their application;

Natural Sciences. 6 credits in courses in physical, chemical or biological sciences;

Social Sciences. 6 credits in courses related to the study of the individual (development and behavior) and society.

Specific courses which may be used to meet these requirements are listed in the following groups:

English Communication: Writing (Cw)—BGS 100; CMS 101; ENG 103; MGT 227; WRT 101, 102, 103, 112, 122, 123, 300, and 333. **General (C)**—CMS 101; PHL 101; SPE 101 and 103.

Fine Arts and Literature (A): ART 101, 103, 120, 203, 207, 215, 231, 233, 251, 252, 263, 265, 280, 284, 285, 359, 374; CLA 394, 395, 396; CLS 160, 250, 335; ENG 160, 241, 242, 243, 245, 246, 251, 252, 263, 264, 265, 280; FRN 327, 328, 391, 392, 393; GER 325, 326, 391, 392; HPR 101; ITL 325, 326, 391, 392, 395; MUS 101, 106, 111; PLS 233; RUS 325,

326, 391, 392; SPA 303, 306, 391, 392; SPE 231; THE 100, 181, 381, 382, 383.

Foreign Language or Culture (F): This requirement shall be fulfilled in one of the following ways: (1) a two-course sequence in a language previously studied for two or more years in high school through at least the 103 level in a living language or 301 in a classical language appropriate to a student's level of competence (e.g., 102 and 103, 102 and 301; 131 and 103; 103 and 104; 301 and 302); (2) demonstration of competence through the intermediate level by examination¹ or by successfully completing 104 in a living language or 302 in a classical language; (3) coursework in a language not previously studied (or studied for less than two years in high school) through the beginning level; (4) study abroad in an approved academic program for one semester; (5) majoring in a foreign language; (6) coursework selected from one foreign culture cluster taken, if possible, in the same or successive semesters from the following list: *Africa*, AAF 250, APG 250, 313, HIS 388, PSC 408; *American Indian*, APG 303, 311, HIS 344; *Ancient Greece and Rome*, ART 354, CLA 394, 396, ENG 366, GRK 109, 110, HIS 111, PHL 321; *East Asia*, HIS 171, 374, 375, PHL 331, RLS 131; *France*, ART 265, FRN 392, 393, HIS 330; *Germany*, GER 392, HIS 125, 326, 327; *Ireland*, APG 325, IRE 391, 392; *Islamic Civilization*, HIS 174, 175; *Israel*, HIS 378, PSC 321; *Latin America*, APG 315, HIS 180, 381, 382, 383, 384; *Medieval Europe*, ART 356, HIS 112, 304, ITL 395, PHL 322; *Modern British Civilization*, ART 264, ENG 252, HIS 123; *Modern Europe (Early)*, ART 359, HIS 113, 306, 307, 314, PHL 323; *Modern Europe*, ART 363, HIS 114, 310, 311, 315, PSC 401; *Renaissance in Europe*, ART 365, HIS 305, ITL 391, SPA 391; *Russia and the Soviet Union*, HIS 132, 332, 333, RUS 391, 392, PSC 407; *URI in England*, ENG 397, HIS 397. *Formally registered international students and students with a recognized immigrant status shall be exempt from the foreign language or foreign culture requirement.*

Letters (L): BGS 392; HIS 103, 105, 111, 112, 113, 114, 115, 116, 118, 122, 125, 132, 141, 142, 143, 145, 150, 171, 180, 304, 305, 306, 307, 309, 310, 311, 315, 321, 322, 323, 324, 325, 327, 332, 333, 340, 341, 342, 346, 353, 354, 381, 382, 383, 384; HPR 104; NUR 360; PHL 103, 104, 117, 312, 314, 318, 319, 321, 322, 323, 324,

325, 328, 331, 346; PSC 240, 341, 342; RLS 111, 125, 126, 131, 227; SPE 200, 205, 210.

Mathematics (M): CSC 201; EST 220; MGS 101, 102; MTH 107, 108, 109, 111, 141, 142.

Natural Sciences (N): APG 201; AST 108; AVS 101; BGS 391; BIO 101, 102A; BOT 111; CHM 100, 101, 102, 103, 105, 112, 114, 124, 191, 192; FSN 207; GEL 100, 103, 104, 105, 106; HPR 103; NRS 212; OCG 401; PHY 111, 112, 120, 130, 140, 185, 186, 213, 214, 285, 286; ZOO 111, 286.

Social Sciences (S): AAF 101, 102; APG 200, 202, 203, 319; BGS 390; CNS 220; ECN 125, 126, 300, 361; EDC 102, 312; ENG 232, 330; FSN 150; GMA 100, 102, 131; HCF 220; HLT 123; HPR 102; HSS 350; LIN 201, 202; MGT 110; NES 200; NRS 100; NUR 150; PSC 113, 116, 201, 221, 288; PSY 103, 113, 232, 235, 254; REN 105; SOC 100, 102, 204, 206, 210, 212, 214, 216, 224, 238, 240, 241, 242, 316, 330, 336; SPE 220; TMD 224; WMS 200.

Honors students may receive General Education credit for honors sections of courses which have been approved for General Education credit.

Transfer students may receive General Education credit for courses taken at other institutions as long as such credits are in courses equivalent to courses given General Education credit at the University of Rhode Island.

In the Colleges of Arts and Sciences and Human Science and Services and for the Bachelor of General Studies, credits within a student's own field of concentration may not be counted towards General Education requirements in Fine Arts and Literature, Letters, Natural Sciences or Social Sciences. In other colleges, credits within a student's professional college may not be counted towards any General Education requirements. However, courses which serve as prerequisites for a major may be used to fulfill the General Education requirement.

¹Students who fulfill this requirement through an examination cannot earn course credit for graduation. Students who earn less than 6 credits in fulfilling the requirement should apply credits to the elective or major areas.

Students must meet the curricular requirements of the colleges in which they plan to earn their degrees. Some colleges require that students select specific courses from the above lists. Therefore, students must refer to the requirements specified for their programs (pages 29-78).

Other Academic Requirements

Certain basic courses are required in many curriculums for transfer from University College into the degree-granting colleges at the junior-year level. These are listed in the individual colleges' curriculums.

The responsibility for meeting all course and credit requirements for the degree must rest with each individual student.

Students who desire to accelerate their programs and receive credit for courses taken at other institutions or during Summer Session or in the College of Continuing Education must have prior approval from their academic deans.

Interdepartmental Study

Students are encouraged to develop interests across departmental lines, and interdepartmental curriculums and areas of interest have been developed.

African and Afro-American Studies. Students who declare African and Afro-American Studies as a minor (see page 29) may use the following courses to fulfill the requirements. AAF 101, 102 (6 credits) are required. Elective courses (12 credits) may be selected from AAF 250, 390, 410; APG 313; ENG 345, 346, 444; HIS 150, 175, 345, 379, 384, 388, 580; PSC 495, 510; REN 595; SOC 240, 214. Permission may be obtained on an ad hoc basis to use other courses that have as their central focus one or another aspect of the black experience.

Comparative Literature Studies. This program is offered jointly by the Department of English and the Department of Languages represented by the following national literatures: French, German, Greek, Italian, Latin, Portuguese, Russian, and Spanish. One of the concentration options and some individual courses are interdisciplinary. For a

description of the curriculum and a listing of the courses see pages 34 and 91.

Consumer Affairs. This interdisciplinary program is designed for students who wish to develop effective strategies for dealing with complex social and economic systems relating to consumer concerns. Although affiliated with the Division of Interdisciplinary Studies in the College of Human Science and Services, coursework is drawn from a variety of colleges and departments to provide a broad perspective on issues relating to consumers. An internship or field experience is an integral part of the program. Interested students should consult with the program head or a member of the Consumer Affairs Coordinating Committee for program planning and course approval. (See page 64).

Students who declare a minor in consumer affairs are required to complete 18 credits in selected coursework. Suggested courses might include: CNS 220, 320, 350, 420, and 422, as well as courses in political science, marketing, and business law.

Gerontology (The Study of Human Aging). The Program in Gerontology is a University-wide program which promotes study, teaching, and research in aging throughout the University. It also maintains relationships with state and local agencies which serve the older population of Rhode Island. This affords opportunities for research, internships, and field experiences to students interested in the problems of aging.

The Adulthood and Aging option within the Bachelor of Science degree in Human Science and Services is limited to 15 students a year. There is also opportunity for students taking their major studies in a number of areas to do a less specialized study in aging by declaring a minor in gerontology. This must be done not later than the first semester of the senior year. It requires 18 or more credits in aging-related studies approved by the Program in Gerontology and the college in which the student is registered.

HCF 220 (Gerontology: Theory and Application) is required for either specialization. It also meets a social science requirement in General Education. Undergraduate gerontology courses include HCF 221, 420, 422, 431; CNS 342, DHY 462, FSN 307, RCR 416 and SOC 438. Also relevant are ZOO 242, HCF 380, 421, 450, and the University Year for Action.

It is important to take courses which fulfill degree requirements from the beginning. Students who wish to specialize in aging are advised to contact the Program in Gerontology early in their university studies.

Human Science and Services. The Program in Human Science and Services is an interdisciplinary program designed for students who wish to work with people, enjoy the social sciences and want to be able to apply them in dealing with people, and want an academic program which will prepare them broadly in the field of human science and services. While the program is a part of the Division of Interdisciplinary Studies in the College of Human Science and Services, courses are drawn from departments across the University. In addition to General Education, the program requires the Human Science and Service core, two 18-credit option areas, professional electives, and a field experience. For a full description of the curriculum and required courses, see page 66.

New England Studies. Students who declare New England Studies as a minor must take either NES 200 or 300 and elect at least one course from each of the following four categories: (1) Cultural Patterns—PSC 221, APG 317, ENG 430; (2) Aesthetic Dimensions—ART 263, ENG 347, 440; (3) Historical Dimensions—HIS 335, 346, 362; (4) Physical Dimensions—BOT 323, 418, 424; FMT 118, FOR 301, 302, GEL 101, 455-57. Permission may be obtained from the Committee for New England Studies to use any rotating topics course, seminar, etc., whose focus is on some aspect of New England as a substitute for any of the above courses.

Special Populations. This interdepartmental minor provides students the opportunity to explore the theory and gain practical experience through working with people who have special needs. This includes people who are handicapped (physically, emotionally, mentally, or educationally) or are different (socio-economically, behaviorally, culturally) and as a result have special needs.

A minimum of 18 credits may be earned by taking the required courses (NUR 101, HCF 200 or PSY 232, PSY 442), a minimum of 3 credits in supervised field experience, and a minimum of 7 credits of selected electives.

Courses are chosen in consultation with an adviser from one of the participating departments: Education; Food Science and Technology; Human Development, Counseling and Family Studies; Nursing; Physical Education, Health and Recreation; Psychology; Sociology; Speech Communication; Textiles, Fashion Merchandising and Design; Theatre. The College of Human Science and Services administers the program and interested students should contact the program head, Jeannette E. Crooker, 130 Tootell Center.

Textile Marketing. This undergraduate interdepartmental curriculum may be pursued through the College of Human Science and Services (Department of Textiles, Fashion Merchandising and Design) or through the College of Business Administration (Department of Marketing). The programs are: Textile Marketing or Marketing-Textiles.

Textile marketing managers are responsible for planning and directing the flow of textile products from the manufacturer to the consumer. The major, which provides a strong background in both textiles and marketing, is designed to give students the opportunity to explore the areas of styling and design, manufacturing, market research, consumer behavior, advertising, promotion, fashion, and sales. The specific requirements of the curriculum may be found on pages 49 and 68.

Urban Affairs. The undergraduate program in Urban Affairs consists of five different interdepartmental degree curriculums: three in the College of Arts and Sciences and two in professional colleges. They aim to provide students with a general understanding of contemporary urban society and the opportunity to pursue specialized study of urban problems and prospects from the perspective of varied disciplines, whatever may be the students' interests and career objectives.

The five majors are: (1) Urban Social Processes, (2) Policy Formation, and (3) Spatial Development, in the College of Arts and Sciences; (4) Home Economics in the Urban Environment, in the College of Human Science and Services, and (5) Resource Development in the Urban Environment, in the College of Resource Development.

The curriculum in each major consists of common core courses and specialization courses. The common core (18 cred-

its) is made up of the following requirements: URB 210 and URB 498 or 499 (6 cr.); three credits selected from CSC 201, EST 220, 408 or 409, PSY 300, SOC 301; and 9 credits selected from CPL 410, ECN 402, SOC 214, PSC 460, HIS 363. The specialization courses are detailed in the appropriate college section in this bulletin.

The Urban Affairs Program is coordinating its offerings with the Department of Social Sciences at the Community College of Rhode Island. Students at the junior college are encouraged to consult with their advisers if they wish to transfer to any one of the majors in the College of Arts and Sciences.

The Urban Affairs Program Coordinating Committee includes faculty members from departments throughout the University and supervises the operation of the program. With the endorsement of the faculty of the college concerned, the committee certifies completion of the major requirements for the appropriate undergraduate degree. A member of the committee serves as adviser for each of the five majors and provides interested students with information.

Women's Studies. This program is designed for students who are interested in the interdisciplinary study of the culture and experiences of women. Courses are currently offered in four different colleges and eleven different departments in order to provide a wide perspective. For a complete description of the curriculum see page 44.

Preprofessional Preparation

Competition for places in graduate professional schools is keen, and a superior academic record throughout college is necessary for admission to these schools. Since requirements for the professional schools vary in their "essential" and "recommended" subjects, the student should consult the catalog of the professional school and then plan his or her undergraduate program accordingly. Those seeking careers as social workers may enroll as majors in sociology, including in their curriculum the social welfare courses. A basic foundation for graduate study, whether directed toward college teaching or research careers, can be provided through any of the liberal arts or science majors. The bachelor of

arts curriculum provides specific majors for those planning to become journalists or public school teachers.

Prelaw Studies. For students who plan professional study of law, guidance and program advice are provided by departmental advisers assigned in University College and by major advisers within various departments and colleges.

Students interested in law school should consult the *Prelaw Handbook*, prepared by the Association of American Law Schools and the Law School Admissions Council. The association finds it inappropriate, given the wide range of a lawyer's tasks, to prescribe either a set of prerequisite courses for prelaw students or preferred major departments. Rather, it recommends that students choose their majors dependent upon their own individual intellectual interests and upon "the quality of undergraduate education" provided by various departments and colleges. "Shortly stated, what the law schools seek in their entering students is . . . accomplishment in understanding, the capacity to think for themselves, and the ability to express their thoughts with clarity and force." The association emphasizes that "the development of these fundamental capacities is not the monopoly of any one subject-matter area, department or division."

Premedical Studies. For students who plan professional study in medicine, guidance and program coordination is provided by the premedical adviser and the URI Premedical, Predental, Preveterinary Advisory Committee, known as The Premedical Advisory Committee (Rm. A123, Biological Sciences Bldg.).

The student should consult the prerequisites for professional schools to which he or she may expect to apply for admission. These are listed in *Medical School Admission Requirements*, published annually by the Association of American Medical Colleges. Copies of this reference and the requirements of certain medical schools are available in the Premedical Office, A123, Biological Sciences Bldg.

Medical schools generally require at least a 3.3 grade point average and high scores on the required Medical College Admission Test (MCAT), taken preferably in the spring semester of the third undergraduate year.

From an evaluation of the distribution of scores of the test, it is reasonable to assume that successful applicants to med-



ical schools will rank in the intervals with a mean of 10 or above in the the 15-interval scoring system. Similar results are expected on the Dental and Veterinary Medical School Administration tests although their scoring systems differ.

All candidates must have personal interviews with the Premedical, Predental, Preveterinary Advisory Committee. Normally these interviews will take place during the spring semester of the third undergraduate year.

Since only about one third of each 100 applicants to medical schools are admitted, it is wise to plan for an alternative career.

The University of Rhode Island-Brown University Early Identification Program for Rhode Island Residents. This is a plan for the early identification and acceptance into the program in medicine at Brown University of highly motivated, exceptionally qualified and interested students at the University of Rhode Island and at Providence College. The plan offers virtual assurance of a position in

Brown's program in medicine, so long as the student completes the required courses and maintains a good academic performance. The program is designed to encourage a few of the most highly motivated students, who are Rhode Island residents, to make an early commitment to the study of medicine at Brown by providing them with acceptance assurance similar to that afforded students entering Brown's optional medical education program directly from high school.

URI students with cumulative averages of 3.4 and above are interviewed and evaluated by the URI Premedical, Predental, Preveterinary Advisory Committee after the completion of their freshman year. Certain of these students are then recommended to Brown by the URI Premedical Advisory Committee on the basis of an *excellent academic record, exceptional promise as a premedical student, apparent suitability for the profession of medicine, Rhode Island residency* and a desire to study medicine at Brown. During the sophomore year, the nominated students are interviewed and their

applications are evaluated for admission to the program.

Upon acceptance, they have the same status as their Brown counterparts, while continuing their studies at the University of Rhode Island. Like the Brown students, they are free to major in the arts or humanities, if they wish, as long as they complete the required premedical courses. As undergraduates they are also invited to take one or two of their premedical courses on the Brown campus with their future classmates, and are invited to colloquiums and various social events sponsored by the Brown Medical Student Society.

After the students in the Early Identification Program have been graduated from URI, at the point of entering the first year of the program in medicine at Brown, they go through the same promotions process required of all medical education program students. Academic performance, interviews with members of the Admissions Committee, Medical College Admissions Test (MCAT) scores, and faculty recommendations are all reviewed. Upon promotion they become full-fledged first-year medical students at Brown University.

Rhode Island resident students interested in this program are urged to register with the secretary of the Premedical Advisory Committee during the spring semester of their freshman year or early during the fall semester of the second year at URI.

Predental Studies. The recommendations for premedical preparation also apply to predental students, who are counseled by the same advisory committee.

The student should consult the course requirements for each dental school to which he or she may expect to apply for admission. These are listed in *Admissions Requirements of American Dental Schools*, published annually by the American Association of Dental Schools.

The Dental Admissions Test (DAT) is required, and normally this test is taken in the spring of the third undergraduate year. Competition for admission into dental school is as keen as that experienced by premedical students. Thus, an excellent academic record, along with a 5 or 6 in each section of the test, usually is required.

Each candidate must have personal interviews with the URI Premedical, Predental, Preveterinary Advisory Committee. Normally these interviews will

take place during the spring semester of the third undergraduate year.

Premedical and Predental Curriculum.

A premedical or predental student may choose to study in any liberal arts, science or professional college, so long as the courses that are required by medical schools are included. Most students major in one of the biological or health sciences or in a related field, such as pharmacy or chemistry.

A recommended course of study is outlined below. *Italicized items are indispensable* for admission to any medical or dental school. Ideally, these courses, or their equivalents, should be substantially completed before the MCAT or the DAT is taken.

Chemistry. At least 16 semester-hour credits, including *general inorganic*, qualitative, and *organic*; physical chemistry is sometimes required and is frequently recommended: CHM 101, 102, 112, 114, 227, 228, 226; and in some cases 431 and 432, each with the associated laboratory.

Biology. At least 11 credits, including *general animal biology*, embryology, physiology or anatomy, genetics: ZOO 111, 316, 321, or 345, BOT 352.

Physics. At least 8 credits including PHY 111, 112.

Mathematics. At least 6 to 9 credits, through calculus, MTH 141, 142.

English and Communications. At least 12 credits, including WRT 101, 102 and a year of literature.

Modern Foreign Language or Greek or Latin. Through the intermediate level.

Social and Behavioral Studies. At least 6 credits. Psychology: PSY 113. Sociology: SOC 100.

Preveterinary Studies. Students who are interested in preparing for a professional career in veterinary medicine are counseled by the URI Premedical, Predental, Preveterinary Advisory Committee. Requirements for admission into the study of veterinary medicine vary and the catalogs of veterinary schools should be consulted for specific requirements early in a student's undergraduate years. Many schools require the Veterinary Aptitude

Test (VAT) or the Graduate Record Exam (GRE). Ordinarily, either test should be taken in the spring semester of the third undergraduate year. Moreover, some experience in the animal sciences is expected by some veterinary medical schools.

A preveterinary student may choose to follow the Bachelor of Science curriculum in Animal Science (described elsewhere in this *Bulletin*), or he or she could be guided by the course of study recommended above for premedical and predental students.

Each candidate must have personal interviews with the URI Premedical, Predental, Preveterinary Advisory Committee. Normally these interviews will take place during the spring semester of the third undergraduate year.

Competition for admission into schools of veterinary medicine is extraordinary. Therefore, evidence of high motivation and an outstanding academic record are essential.

Special Academic Opportunities

Honors Program. The University Honors Program offers bright and motivated students opportunities to broaden their intellectual development and to strengthen their preparation in major fields of study. The program consists of courses in analytical thinking skills which prepare academically talented students to get the most from classes throughout their undergraduate years, a year-long colloquium which brings distinguished authorities to campus from across the nation, special tutorials in major concentrations of study, and independent research projects under the guidance of a faculty sponsor. Honors courses on the 100 and 200 level treat general topics and usually count for General Education credit in particular divisions. Those on the 300 and 400 level are more specialized and often are used to fulfill the requirements of a major.

Eligibility standards are established yearly by the Honors Program and Visiting Scholars Committee. Students may take honors work if they meet the following standards: freshmen must have graduated in the upper 10 percent of their high school class or must submit a letter of recommendation from their high school principal or guidance counselor; sophomores, juniors, and seniors must have earned at least a 3.2 cumulative

grade point average. (Under special circumstances, these eligibility requirements may be modified with the permission of the Honors Program director.)

Eligible students may participate in the Honors Program in one of two ways: they may take honors courses on an occasional basis, registering for any number or pattern of courses which interest them; or they may do honors work on a regular basis, meeting the specific requirements to receive the transcript notation, "Completed the University Honors Program." In the latter case, a student must begin honors work no later than the beginning of the junior year and must complete a minimum of 15 honors course credits which meet the following requirements: 1) 6 credits in 100- and 200-level honors courses including at least three credits of the colloquium; 2) 9 credits in 300- and 400-level honors courses including three credits of a tutorial and six credits of the honors project or special seminar; and 3) a 3.2 grade average for honors courses and a 3.2 cumulative grade point average.

See page 110 for a list of honors courses.

National Student Exchange Program. The National Student Exchange Program offers University of Rhode Island students the opportunity to study at more than 70 participating state colleges and universities in 39 states at in-state rates or URI tuition while maintaining their status as URI students. NSE offers the opportunity to explore new geographical areas, experience academic diversity, and study under different educational and social circumstances in various parts of the United States. Financial aid is available to participants in this program. For further information, contact the National Student Exchange Coordinator, University College.

New England Land-Grant Student Exchange Program. Students with special academic interests may now take advantage of the talent and resources available at the state universities of the region without having to become a degree candidate at another institution. Under a cooperative agreement, URI students can study for one or two semesters at the other New England land-grant institutions if they wish to take a course, a sequence of courses, or part of a program which is not available at URI. Students participating in this program pay their normal URI tuition and fees and maintain

their status as URI students. Advisers or members of the University College staff have more information about this program and its requirements.

Ocean Studies. Undergraduates are encouraged to explore opportunities on the Narragansett Bay Campus for active participation in the oceanographic sciences. The program allows juniors and seniors to examine their individual marine interests. Students may spend an entire semester at the Bay Campus, for which they receive full academic credits. They work in the laboratory and in the field under the direct guidance of the Graduate School of Oceanography faculty. Usually they are part of a research team.

Study Abroad. The Study Abroad Office, located in University College, maintains information about overseas study programs and helps students make arrangements for foreign study. The Office also assists in the evaluation of credits from study abroad. The University of Rhode Island sponsors exchange programs with universities in England, France, Germany, and Japan which make study abroad available to our students for little or no cost beyond the normal URI tuition and fees. The University also participates in the New England-Quebec exchange program enabling our students to study at any one of the ten English and French-speaking universities in Quebec on an exchange basis. Study abroad programs at the other New England land-grant universities and at institutions participating in the National Student Exchange Program may also be open to our students. The Study Abroad coordinator helps students who wish to participate in these or other approved academic programs to choose the appropriate programs and to handle the procedures for obtaining prior approval for courses to be taken abroad and for retaining matriculated status at the University of Rhode Island during their absence from campus.

University Year for Action. The UYA Internship Program, administered by the dean of the University College, is an academic program that provides undergraduate students with opportunities for professional development and field study. It is especially designed for the motivated student who wishes to apply classroom learning to a field experience in a career-related setting. Students from any under-

graduate curriculum may apply for up to 15 credits in free electives.

Students work full time (32 hours a week) under the supervision of qualified professionals in carefully selected settings. A weekly seminar brings interns together to discuss issues that emerge during the internship. The program offers students a choice of more than 200 placements that include the categories of law, counseling, advocacy, administration, public relations, communications, alternative education, health, and nutrition.

To apply, students must have a minimum QPA of 2.5 and junior or senior standing.

Dean's List

Undergraduate students who have achieved certain levels of academic excellence in any semester are honored at the end of that semester by inclusion of their names on the Dean's List. The Registrar will publish lists of students who have attained the required quality point average.

A student may qualify for the Dean's List if he or she has completed 12 or more credits for letter grades and achieved a 3.3 quality point average.

Pass-Fail Grading Option

This plan encourages undergraduate matriculated students to increase their intellectual breadth and discover aptitudes in new areas of knowledge. A student above the freshman level who is not on probation may register under this plan for courses considered by the college in which he or she is enrolled as free, unattached electives. Courses that are stipulated in the student's curriculum as degree requirements, General Education requirements, and military science courses may not be included.

A student choosing to take a course under this plan must notify his or her adviser, academic dean and the Registrar's Office in writing, prior to the end of the add period of each semester. The instructor is not informed.

Grades will be P (pass) or F (fail). The P grade is credited toward degree requirements, but not included in the quality point average. The F grade is calculated in the same manner as any other failure. If a student has selected the P/F option

for a course, then decides not to use the P/F option, he or she may change by notifying the Registrar before the last date for dropping courses.

A student may elect not more than three P/F courses each semester and not more than two P/F courses during a summer.

Reserve Officers Training Corps (ROTC)

The Military Science Department offers the ROTC Program which enables college students to earn a commission in the United States Army while simultaneously earning a college degree. A four-year program introduces the military science student to military history, international relations, leadership, management, and the principles of effective organization. To qualify for the advanced ROTC program (junior/ senior year) a student must earn 7 credits in basic military science courses (100 or 200 level courses.) A laboratory period allows students to put into practice the theory presented in academic instruction. Credit toward graduation is received for all classroom instruction and, for the final two years of instruction, each student receives a monthly stipend of \$100. A student may compete for Army ROTC scholarships whether or not they are enrolled in ROTC courses.

A modified two-year program is available to sophomores and graduate students which substitutes a six-week summer training period for the first two years of ROTC study. An ROTC graduate has the option to serve a tour of duty in the Active Army or a part-time tour in the Army Reserve, Army National Guard or the Individual Ready Reserve.

Grades and Points

Student grades are reported as A, A-, B+, B, B-, C+, C, C-, D+, D, and F. The unqualified letter grades represent the following standing: A, superior; B, good; C, fair; D, low grade, passing; F, failure; S, satisfactory; U, unsatisfactory.

Grades are given quality point values as follows: A, 4.0 points; A-, 3.7 points; B+, 3.3 points; B, 3.0 points; B-, 2.7 points; C+, 2.3 points; C, 2.0 points; C-, 1.7 points; D, 1.0 points; F and U, 0

points. P and S are not calculated in the quality point average.

A grade may be reported as "incomplete" only when coursework has been passing but has not been completed due to illness or another reason which in the opinion of the instructor justifies the report of incomplete. Incomplete grades that are not removed from an undergraduate student's record by the following mid-semester will remain on the student's permanent record.

Making up failures in elective courses is not required, but making up failures in required courses is. The course should be repeated when next offered. No limit is placed on the number of times a course may be repeated, but the credit requirement for graduation is increased by the number of credits repeated.

Under specified conditions and with the approval of the academic dean, freshmen and transfer students in their first semester may repeat a course in which a grade of C- or lower was earned, and have only the grade earned in the second attempt calculated in their quality point average. All grades earned for a given course will remain on the student's permanent academic record.

Certain courses do not lend themselves to precise grading and for these courses, only S (satisfactory) or U (unsatisfactory) shall be given to all students enrolled. S/U courses shall be labeled as such in the University catalogs and bulletins. S/U courses are not counted as courses taken under the Pass-Fail Option.

Probation and Dismissal. A student shall be placed on scholastic probation if the student's overall cumulative scholastic average falls below 2.0. For purposes of determining probation and dismissal of part-time students, scholastic standing committees shall consider an accumulation of 12 credits as the minimum standard for one semester's work.

A student shall be dismissed for scholastic reasons when he or she has a deficiency of eight or more quality points below a 2.0 average after being on probation the previous semester. A student on probation for the second successive semester who has a deficiency of eight or fewer quality points below a 2.0 average will continue on probation. Students who obtain less than a 1.0 average on their first semester shall be dismissed automatically.

A student subject to dismissal shall be so notified by the dean after which he or

she shall have five days to file a written appeal with the dean.

Students are expected to be honest in all academic work. Instructors shall have the explicit duty to take action in known cases of cheating or plagiarism. For details consult the *University Manual*, sections 8.27.17, 18, 19, and 20.

Leave of Absence

Sometimes students are forced to take a semester or two off by circumstances beyond their control. Others find they simply need a break from studying. For these students taking a leave of absence might be wise. Students who have an approved leave of absence for a semester or a year may pre-register for the semester in which they plan to return, and they do not have to apply for readmission. Students may apply for a leave of absence through the Perspectives Program, Office of Counseling and Student Development, Roosevelt Hall.

Withdrawal from College

A student who wishes to withdraw from college prior to the end of the semester or Summer Session term shall do so according to procedures outlined in the semester's Schedule of Courses. Students who withdraw from the University after the last day of classes but before a semester ends shall be graded in all courses for which they are officially registered. If the withdrawal process is completed satisfactorily and the student has cleared all financial obligations to the University, the date of withdrawal shall be noted on the student's permanent academic record. No grades for the current semester shall be recorded. If a student withdraws from the University after mid-semester, grades shall be recorded for any course which has an officially specified completion date prior to the date of withdrawal.

A student who withdraws from the University after mid-semester and who seeks readmission for the next semester shall be readmitted only upon approval of the Scholastic Standing Committee for the college or school in which registration is desired.

Undergraduate Graduation Requirements

To graduate, a student must have completed the work for, and must have achieved the minimum quality point average established by, the curriculum in which he or she is enrolled and must have earned at least a 2.0 quality point average.

The work of the senior year shall be taken at the University of Rhode Island. Exceptions must be approved by the faculty of the college in which the student is enrolled.

Any student who has met the requirements for a second bachelor's degree and has completed an additional 30 hours of credit beyond the minimum requirements for the initial degree may be granted two bachelor's degrees.

Any student who has met the requirements for two separate majors within any single bachelor's curriculum has earned a double major and may have both fields listed on their permanent record.

Students who complete at least 60 credits of their work at the University are eligible to graduate with distinction. Those who attain a cumulative quality point average at the time of graduation of at least 3.3 shall be recognized as graduating "with distinction." Those who achieve a quality point average of at least 3.5 shall graduate "with high distinction" and those who attain a quality point average of at least 3.7 "with highest distinction."

University Manual

University regulations governing matters such as grading, probation and dismissal, academic integrity, withdrawal from college, and graduation requirements are fully explained in the *University Manual*. Copies of the *University Manual* are available in the Library and in the deans' offices.

Admission and Registration



Admission to the University

Ideally, admission to the University is a mutual selection process. It is hoped that those students who seek admission will also be the kind of students sought by the University: those who will benefit from the educational opportunities afforded by the University, those who will be stimulated and challenged by doing undergraduate work in an environment that includes scholarly research and graduate study; those who are committed to becoming contributing members of the University. Students are selected for enrollment primarily on the basis of their academic competence and without regard to age, race, religion, color, sex, creed, national origin, or handicap.

Candidates must meet the unit requirements of the University College as listed below for entrance to the University. Furthermore, to meet the requirements for entry to any of the other colleges in the University at the sophomore or junior level, applicants must complete the additional units recommended by the particular college to which transfer is intended. See page 28 for description of the University College.

Applicants are given individual consideration, but it is expected that all candidates will offer 16 units of college preparatory work as outlined below. If these requirements are not fully satisfied by secondary school study, they may be met wholly or in part by successful performance on appropriate examinations administered by the College Entrance Ex-

amination Board, the University, or the State Department of Education.

Unit Requirements

University College requires 4 units in English, 2 in algebra and/or plane geometry, 1 in physical or natural science, 1 in history or social science, and 8 additional units as specified below for individual colleges.

Arts and Sciences requires 4 units in English, 2 in mathematics (2 in algebra or 1 in algebra and 1 in plane geometry), 1 in physical or natural science, 1 in history or social science, 2 in any single foreign language, and 6 additional units. Majors in chemistry require 4 units of mathematics.

Business Administration requires 4 units in English, 4 in mathematics including algebra, plane geometry, and trigonometry, 2 in a single foreign language, 1 in physical or natural science, 2 in history or social science, and 3 additional units.

Engineering requires 4 units in English, 4 in mathematics (algebra, plane and solid geometry, and trigonometry), 1 in physics and 1 in chemistry, 3 in history, social science and/or foreign language, and 3 additional units.

Human Science and Services requires 4 units in English, 3 in algebra and/or plane geometry, 1 in physical or natural science, 3 in history, social science, and/or foreign language, and 6 additional units.

Nursing requires 4 units in English, 2 in algebra and/or plane geometry, 2 in physical or natural science, 1 in history or social science, and 7 additional units.

Pharmacy requires 4 units in English, 3 in algebra and plane geometry, 2 in physical or natural science, 1 in history or social science, and 6 additional units.

Resource Development requires 4 units in English, 2 in algebra and/or plane geometry, 1 in physical or natural science, 1 in history or social science, and 8 additional units.

It is strongly recommended that additional units be selected from languages, history, mathematics, or science.

Application Procedures. Students should discuss their plans for study at the University with their academic counselors as early as possible to establish realistic goals and program selections. Admissions counselors at the University will be glad to correspond with students on individual problems. Requests for application forms and information should be directed to the Office of Admissions, The University of Rhode Island, Kingston, RI 02881-0807.

Inquiries from international students concerning non-immigrant visas, housing, etc., should be sent to the Office of International Student Services, Lower College Road, The University of Rhode Island.

Students are enrolled at the beginning of the fall semester in September and at the beginning of the spring semester in

January. High school seniors are urged to submit applications early in their final year of preparatory study as the University subscribes to a "rolling" admissions policy, reviewing folders as soon as complete credentials are submitted. However, some applicants find it to their advantage to hold their forms until senior mid-year grades are available, so that their progress in the last year may be assessed by the Selection Committee. Closing date for fall term applications is March 1, and most decisions are reported in February, March and April. Closing date for spring term application is December 1. (For international students the closing date is November 1.)

Early decision is made on the application of any freshman candidate who has established a superior academic record, who has achieved above-average scores on the CEEB Scholastic Aptitude Test, and whose potential as a superior student is reflected in the secondary school endorsement. Applications which meet these qualifications and which are clearly labeled "Early Decision Candidate" are considered on a priority basis if filed prior to November 1.

Applicants to the Bachelor of Music degree program must audition and must contact the music department for specific requirements.

Entrance Tests. All freshman candidates for admission are required to take the Scholastic Aptitude Test. This test is administered by the College Entrance Examination Board. Applicants who have been away from formal studies for at least three years should contact the Admissions Office concerning entrance requirements.

Applicants are encouraged to take the SAT as early as possible in their senior year; delay beyond January date materially reduces a candidate's prospects for a timely decision. Full information concerning this test may be obtained from local high schools or by writing to CEEB Headquarters at P.O. Box 592, Princeton, New Jersey 08540.

International students who are not immigrants must take an English proficiency test administered by the American Consulate or the Test of English as a Foreign Language (TOEFL) administered by the Educational Testing Service, Princeton, New Jersey 08540, U.S.A. Additionally, the Scholastic Aptitude Test is required as outlined above. English

placement tests are required of all incoming undergraduate students.

Interviews. Personal interviews are not part of the normal admissions procedure. It would be impossible for the admissions staff to interview all candidates, and individual conferences are arranged only if a unique problem requires personal discussion.

Group conferences are scheduled several afternoons each week during the fall and early winter months. Students and their parents are invited to participate in these meetings to get acquainted with the University. Visitors are requested to phone ahead (401-792-2164) to be scheduled for these meetings.

Campus Tours. The University provides daily tours of the campus for visitors, Monday through Saturday, while classes are in session. The tours are conducted by students. Group tours for high schools and other organizations may also be arranged. For more information about this service, phone (401) 792-2737.

Early Enrollment (Early Admission).

Students who have completed their junior year of high school with superior records are eligible for early admission. A part-time study program may be arranged for students who wish to begin college study in their senior year while continuing their high school work. A full-time program may be arranged for those recommended for college admission without completion of the standard preparatory program.

Early admission students would normally have completed: 3 years of English, 3 years of mathematics, 2 years of foreign language, 2-3 years of social studies or history. Students should be academically competitive within their high school class, have corresponding scores on the College Board PSAT, SAT or equivalent tests, and the endorsement of their school.

Interested persons should plan with their high school counselor early in their junior (11th) year and direct further inquiries to the University Admissions Office.

Advanced Standing

Advanced placement for freshmen is granted to students who have completed college-level courses in a high school participating in the Advanced Placement Program and have passed with a grade of 3 or better the CEEB Advanced Placement

Examination in the subject area for which advanced placement is sought. In addition, students also may take proficiency examinations administered by departments of the University to be granted advanced placement. Entrance with advanced standing can accelerate the completion of degree requirements, or it can enrich the undergraduate program with greater scope for elective or advanced courses.

Transfer students who have attended, or are attending another college or university, are required to have official transcripts sent directly from the institution, whether or not they expect or desire credit for such work; their high school record must also be submitted. Most successful applicants offer a cumulative grade point average above 2.4. Certain programs may require a higher grade point average or specific prerequisite courses. Candidates accepted with transfer credit are classified as freshmen, sophomores, juniors, or seniors according to the number of credits accepted for transfer. The transfer of General Education credits is described on page 9.

Proficiency Examinations. Students who show evidence of advanced knowledge or who have taken "enriched" programs in high schools may be exempt from certain courses and requirements if they take departmental proficiency examinations. A student who successfully passes such an examination earns credits as well as exemption from the course.

Upperclassmen interested in taking these exams should contact their academic dean. New students may obtain further information during the orientation or from their assigned adviser in University College.

College Level Examination Program.

CLEP General Examinations. Students who have not been pursuing formal studies for at least three years may take the CLEP General Examinations to demonstrate academically measurable learning acquired in non-traditional ways. URI students must secure prior approval from their academic dean to take the exams for credit. Transfer students may receive credit from CLEP General Examinations taken prior to enrollment at URI provided that their scores meet URI standards and provided that their academic dean judges that the CLEP credit does not duplicate other transfer credit.

CLEP General Examinations may be taken in the following areas (URI credits for these are shown in parentheses):

	Minimum score
English Composition (English composition elective 3 credits ¹)	560
Fine Arts (Fine Arts elective, 3 cr.)	46
Literature (Literature elective, 3 cr.)	45
Biological Sciences (Natural science elective, 3 cr.)	46
Physical Sciences (Physical science elective, 3 cr.)	44
Social Sciences (Social science elective, 3 cr.)	46
History (History elective, 3 cr.)	45
Mathematics (no credit)	

CLEP Subject Examinations. Academic departments may use CLEP Subject Examinations as proficiency exams to test students' mastery of the subjects taught by the department. A department which judges a CLEP Subject Examination to be a satisfactory proficiency exam decides what credit should be awarded within the department to students who pass the exam, establishes the minimum score for credit, decides whether students must answer the optional essay questions supplied by CLEP, and decides whether students must pass a supplementary department test, such as a lab exam. The following CLEP Subject Examinations are accepted by departments as proficiency examinations.

Subject (URI credit)	Minimum raw score	Minimum percentile
American Government (PSC 113)	47	38th
American History ² (HIS 141, 142)	45	40th
American Literature (ENG 241, 242)	46	37th
Analysis & Interp. of Literature (ENG or WRT 103)	49	43rd
Biology (BIO 101, 102)	49	47th
College Algebra-Trig. (MGS 101 or MTH 109)	49	50th

¹Three additional credits may be earned by completing a writing sample test administered by the College Writing Program.

²Optional essays required

Educational Psychology (EDC 312)	47	40th
English Literature (ENG 251, 252)	46	38th
General Chemistry (CHM 101, 102, 112, 114)	47	45th
General Psychology (PSY 113)	47	39th
Human Growth & Devel. (HCF 200 or PSY 232)	47	38th
Introd. to Business Management (MGT 301)	50	50th
Introductory Accounting (ACC 201, 202)	N/A	50th
Introductory Business Law (BSL 333)	51	50th
Introductory Marketing (MKT 301)	50	50th
Introductory Sociology (SOC 100)	48	40th
Western Civilization I ² (100-level HIS elective)	46	52nd
Western Civilization II ² (100-level HIS elective)	47	52nd

Health Questionnaire. Every newly entering student is provided a health questionnaire from University Health Services. It is expected that these questionnaires will be completed and returned promptly. This questionnaire provides University Health Services with basic information prior to the student's arrival on campus. Questionnaires are distributed only after admission to the University and therefore play no part in the process of acceptance to the University.

In accordance with Section 16-38-2 of the General Laws of Rhode Island, the University must have a certificate signed by a licensed physician giving proof of protection against rubella (German measles) and rubeola (measles) for all incoming students.

New England Regional Student Program. Under the cooperative plan of the New England Board of Higher Education (NEBHE), students from other New England states are admitted to certain curriculums at the University of Rhode Island which are not offered in their own states. Certain programs at other New England state universities are open to Rhode Islanders on a reciprocal basis. Regional students at the University will be charged the in-state fee plus a surcharge of 25 percent. However, if the student transfers out of the program of study that qualifies under the New England Regional Student Program, out-of-state fees will apply. Details on the operation of this program are available on request from the New England Board of Higher

Education, 45 Temple Place, Boston, MA 02111, or high school guidance offices. The Office of the Registrar provides information pertaining to this program for students who are already enrolled at the University.

Prospective students who wish to claim eligibility for this program must state so in the appropriate section on their application for admission. Continuing or returning students claim eligibility by contacting the Registrar's Office with a formal request prior to the end of the add period of the semester in which regional status is to be effective.

Special Programs for Talent Development. The University encourages the application of economically, socially, and culturally disadvantaged individuals from Rhode Island. To encourage and assist applicants whose educational background is below college preparatory level, the University has instituted recruiting and prematriculation programs. Financial aid is available for students accepted to Talent Development; need is determined by the filing of a Financial Aid Form.

Interested prospective students should apply to Special Programs for Talent Development during their senior year in high school. Those who have been out of high school for some time and those with an equivalency diploma are also encouraged to apply. Applications and all credentials should be sent to the Admissions Office, Green Hall, during the application period between October 1 and March 1.

Readmission. Students formerly enrolled at the University and seeking reentry, may obtain applications for readmission at the Office of the Registrar. Readmitted students are subject to a \$15 application fee and must make a \$50 advance deposit. All applications for readmission must be submitted to the Office of the Registrar no later than August 15 for the fall semester, and December 31 for the spring semester.

Registration

All students must register for courses through the Registrar's Office in order to be properly enrolled.

Preregistration. The University preregisters matriculated (official degree-seeking)

students who meet the eligibility requirements as defined in the *Schedule of Courses*. Preregistration generally occurs in March and October for the following semester. However, freshmen entering in the fall semester preregister at specified dates during the summer. Additional information is available from the Office of the Registrar.

Registration Day. This is held the day before classes begin for both the spring and fall semesters. All matriculated students who did not preregister (or who did not receive a final schedule) must register at Keaney Gymnasium on this day.

Late Registration. Generally, students are expected to either preregister for courses (if eligible) or to register on registration day. Those who are unable to do so may enroll as late registrants in the Office of the Registrar during the first two weeks of classes. A late registration fee shall be charged unless excused by the Registrar (see p. 21).

Non-matriculating Students. Such students must apply each semester to the Registrar's Office for permission to enroll and for registration instructions. Registration takes place during the first week of classes.

Payment of Fees. Arrangements must be made with the Bursar for complete payment of tuition and/or fees. If, at any time during the semester, it becomes apparent that a student has not met his or her financial responsibilities with the University, the registration for that semester is subject to immediate and irrevocable deletion.

Drop and Add. Students are permitted to add courses during the first two weeks of classes only. Courses offered by the College of Continuing Education may be added, with approval of the instructor, prior to the third class meeting or by the prescribed University deadline, whichever is later.

A course may be dropped by official procedures determined by the Registrar before the end of the fifth week of the semester. Departments shall have the authority to designate selected courses as "early drop" courses which may be dropped up to two days before the end of the add period. Early drop courses will be designated in the *Schedule of Courses*. When such courses are offered by the

College of Continuing Education they may be dropped at any time prior to the third class meeting or by the prescribed University deadline, whichever is later. Graduate students may drop courses at any time up to midsemester. If the student has not dropped a course by the end of the drop period the instructor must submit a grade. A student may drop a course after the end of the drop period only in exceptional circumstances and only with authorization of the dean of the college in which the student is enrolled.

Auditing. Auditors are persons who have permission to attend a course but are not taking the course for credit. Auditing is not permitted in non-credit courses. An auditor may be admitted to a class on a space-available basis with the consent of the instructor as indicated by the instructor's signature on an audit authorization form which must be filed in the Office of the Registrar before the end of the "add" period. The course instructor shall determine the extent to which an auditor may participate in class activities. An auditor's name shall not appear on official class rosters, on the grade report, or on the permanent academic record.

Flexible Scheduling. Simultaneous enrollment in Kingston classes and College of Continuing Education classes may give scheduling flexibility to students with special time and location restrictions. Students should consult their academic adviser or college dean for further information.

Off-Campus Study. A full-time student who wishes to study at another college or university and use that coursework to satisfy graduation requirements at the University of Rhode Island may register for off-campus study with the Registrar to ensure that grades and credits will be accepted. The student must obtain signed approval for the off-campus courses from the dean of his or her college. Off-campus study includes summer sessions, one or two semesters at another American university, or study abroad. A student may not ordinarily study off campus during the senior year. Students who wish to maintain registered status and preregistration eligibility while studying off campus, must register for off-campus study for each semester of absence from the University of Rhode Island campus.

Veterans' Educational Benefits. Full information describing these benefits may be obtained from your base education officer or from the Veterans Administration Regional Office, 321 South Main Street, Providence, Rhode Island 02903. A toll-free number is available for inquiries by asking the long distance operator for Enterprise 5050.

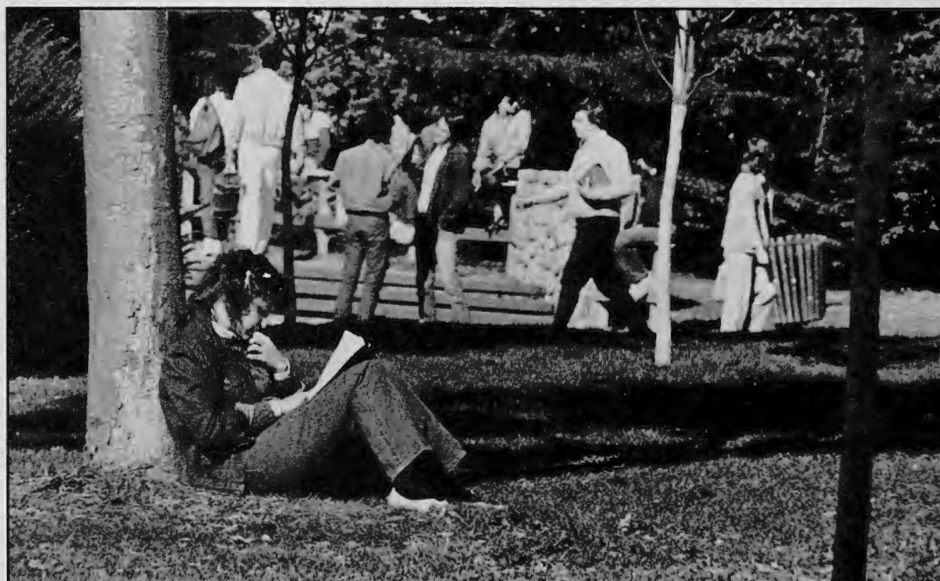
Veterans who are eligible and who wish to receive VA educational benefits must notify the Office of the Registrar in person. In order to satisfy Veterans Administration regulations, all students who receive VA educational benefits must report all changes in academic status to the veterans' registration clerk in the Office of the Registrar.

Recipients of VA educational benefits are also governed by the same University policies as all other students and are, therefore, responsible for completing those procedures described in the *Schedule of Courses* for effecting changes of status (adding and dropping courses, changing address, withdrawing from the University, etc.).

The *University Manual* and the *Graduate Student Manual* further explain the University's policies and procedures concerning the following: 1) the grading system and standards of progress required of the student by the University and the conditions for dismissal for unsatisfactory grades; the allowed probationary period, and the conditions of reentrance for academically dismissed students (see: *University Manual*, Chapter 8; *Graduate Student Manual*, Appendix A; *Students' Guide to URI*, Section 2). 2) the records of academic progress maintained by the University and furnished to the student (see: *University Manual*, Chapter 8; *Graduate Student Manual*, Appendix C). 3) the policies and regulations relating to student conduct and conditions for dismissal for unsatisfactory conduct (see: *University Manual*, Chapters 5 and 6; *Graduate Student Manual*, Appendix A).

Change of Address. It is the responsibility of the student to complete a change of address form in the Office of the Registrar whenever a change is made in his or her local, or home mailing address.

Expenses and Student Aid



Expenses

Charges and fees set forth in this bulletin are subject to change without notice.

In addition to the University fees outlined below, a student should expect to spend about \$330 per academic year for books and supplies, and allow for additional expenditures for travel and personal needs.

All charges are payable by the semester and are due and payable on receipt of the bill or by the due date indicated on the bill. Checks or money orders should be made payable to the University of Rhode Island.

Full-time Students Pay Per Year

In-state fee (general fee)	\$1,484.00
Out-of-state fee	5,056.00
Regional student fee ¹	1,856.00
Memorial Union fee	148.00
Student Activity tax	48.00
Accident and sickness insurance	140.00
Student Health fee	164.50
Registration fee	20.00

Students Living in University Residence Halls Add

Room Rent	\$1,795.00 to \$1,970.00
Board—	
7-day meal book (20 meals)	\$1,515.00
5-day meal book (15 meals)	\$1,298.00
5-day meal book (10 meals)	\$1,198.00

Students Living in a Fraternity or Sorority Add

Average room rent	\$1,520.00
Average board	1,532.00

Part-time Students

Part-time students, registered for up to 11 credit hours per semester are charged the fees below:

Tuition, per credit hour	
Rhode Island residents	\$62.00
Out-of-state students	\$211.00
Regional students ¹	\$78.00
Registration fee per semester	\$10.00
Memorial Union fee, 1-4 credits	11.00
5-11 credits	22.00
Student Activity tax	12.00

Reassessment of Fees. Students are allowed to drop and add credits during the first two weeks of each semester (add period). Fees are reassessed and adjusted according to the credit enrollment and/or student status resulting from drop/add transactions as processed by the Registrar during the add period. Subsequent to the add period, term bills are only reassessed for part-time students who add credits and full-time students adding credits beyond the credit overload limit. *Note: Dropping of credits after the add period does not reduce term bills.*

Credit Overload Fee. A credit overload fee is charged to all students who register for more than 19 credits per semester. It is assessed according to residency and is charged per credit above the 19-credit

limit. Enrollment at the Kingston and Providence locations is combined when determining this fee. *Note: Dropping overload credits after the end of the add period does not reduce term bills.*

Kingston and CCE Enrollment. All students who are full time because of combined enrollment at both the College of Continuing Education and the Kingston campus (12 credits and over) are assessed the following fees at the standard full-time rate when enrolled in at least 7 credits on the Kingston campus: Memorial Union fee, Student Activity tax, Accident and Sickness insurance, Student Health fee. Students whose enrollment at the Kingston campus is less than 7 credits are charged the fees at the part-time rate. *Note: Dropping credits after the end of the add period does not reduce term bills.*

Resident Student Status. A student who is a resident of the state of Rhode Island pays the in-state fee, but a student from another state or a foreign country who is in Rhode Island primarily for educational purposes, even though he or she remains in the state during vacation periods, is considered a non-resident and pays the out-of-state fee.

The parents or legal guardians of a minor student must have been residents of the state for one year immediately preceding the first class day of the first term of a student's registration for that student to claim resident student status.

An "emancipated student" must establish the same bona fide residency for in-

¹See page 18 for description of the NEBHE interstate program.

state tuition exemption. An emancipated student shall mean a student who has attained the age of 18 years, and whose parents have entirely surrendered the right to the care, custody, and earnings of the student and have not claimed the student as a dependent for tax purposes for two years. If any of these conditions is not met, he or she is presumed to be an unemancipated student. A non-resident student who reaches 18 years of age while a student does not by virtue of that fact alone become a resident student.

Dependents of members of the armed forces, as well as members of the armed forces stationed in the state on military orders, are entitled to classification as resident students.

The Dean of Admissions classifies each student admitted to the University as a resident or non-resident student on the basis of all relevant information available to him. A student may appeal the decision to the Board of Residence Review. The above information is merely a summary of the regulations governing student classifications for tuition purposes. The complete text of the regulations adopted by the Board of Governors for Higher Education may be obtained from the Office of Admissions.

Tuition Waiver for Senior Citizens. Permanent residents of Rhode Island who are 60 years of age or older are entitled to take courses at the University without payment of tuition, although other fees and charges are still applicable. Admission to particular courses will be granted on a space-available basis. Eligible persons should contact the Office of the Registrar.

New Student Fees. A nonrefundable fee of \$15 must accompany each application for admission. See page 16 for application procedure.

An advance deposit of \$50 is required from every accepted student. The advance deposit, which is applied on the first term bill, will be forfeited if the applicant later withdraws his or her name.

Students returning after an absence of one or more semesters are subject to the same application fee and advance deposit as entering freshmen.

Student Assessments. Each student is assessed \$48 per year which is distributed by the Student Senate to support a wide variety of student programs and activities.

A Memorial Union fee of \$148 per year is also assessed.

Late Fees and Special Fees. A late registration fee is charged to students whose registration is not completed before the first day of classes. The fee is \$15 during the week in which registration day falls; \$50 thereafter.

Expenses for class trips in all courses and those incident to practice teaching in vocational education courses are charged to the students concerned.

Applied Music Fees. Students taking performance courses in music are charged an additional fee each semester of \$60 for MUS 050, \$80 for MUS 251, 451, 551, and \$120 for MUS 261, 461, 561 for private lessons associated with the course.

Student Nurses' Fees. Beginning in the sophomore year, student nurses must purchase authorized uniforms and nursing equipment. The approximate cost is \$175.

Transcripts. Each student who graduates from the University is entitled to one official transcript without charge. The fee for all other transcripts is \$2, except that the fee for multiple copies ordered at the same time is \$2 for the first copy and \$.50 for each additional copy. Copies will be mailed in response to written requests only, which should be addressed to the Office of the Registrar.

Transcripts will not be issued to students who have any unpaid financial obligation to the University.

Health Service Fees. The health fee of \$164.50 is mandatory for all full-time undergraduates, all international students and spouses, and all full-time graduate students. All international students, spouses, and dependents must enroll in the Student Accident and Sickness Insurance Plan. All other students are required to enroll in this plan unless evidence of comparable coverage in another plan is provided and the student completes, signs, and returns a waiver to the Bursar's Office prior to the end of the add period (first two weeks of school). A waiver of insurance is found on the reverse side of the return copy of the term bill. Waiver forms may also be obtained directly from the Office of the Bursar. Part-time students and spouses of students are eligible to participate in the health and insurance plan on an optional basis.

The health fee covers all outpatient care at Health Services with the exception of

laboratory and X-ray services. Students must have insurance which covers these services.

Refunds. Refunds of payments made or credits against amounts due to the University shall be made to students who officially withdraw or take a leave of absence according to the following scale: during the first two weeks, 80 percent; during the third week, 60 percent; during the fourth week, 40 percent; during the fifth week, 20 percent; after five weeks, none.

The attendance period in which withdrawal or leave of absence occurs is counted from first day of registration and includes weekends and holidays.

Coverage under the University Sickness and Accident Insurance terminates upon withdrawal of the student for any reason other than graduation or incapacitating disability. Students whose coverage has terminated for reason of withdrawal may request a pro-rata refund of premium from the insurance company. (For further information, refer to the current Student Sickness and Accident Insurance brochure.)

Housing Rates. Following are the rates for University housing for the year 1985-86. For complete information write to the Director of Residential Life, Roger Williams Commons. All rates quoted are for double rooms. For single rooms, where and when available, \$100 per year is added to the double rate. Board is mandatory for students living in residence halls.

Residence Halls

\$1,795 Barlow, Bressler, Browning, Butterfield, Hutchinson, Merrow, Peck, Tucker, Weldin
\$1,970 Aldrich, Burnside, Coddington, Dorr, Ellery, Fayerweather, Gorham, Heathman, Hopkins

The average projected room rate for fraternities and sororities for 1985-86 is \$1,520. The average projected board rate for fraternities and sororities is \$1,532.

Housing and Dining Contract. University housing is contracted for the *entire academic year*. A deposit of \$100 is required at the time of filing application for a room in the residence hall. This deposit will be applied on the first semester bill. A cancellation of the housing application will result in a pro rata credit on the semester bill according to the following schedule: from date of deposit to

June 15, \$100; from June 16 to the opening of the residence halls for the academic year, \$62; after that time, no refunds will be made.

All residence hall rates are quoted for the period specified in the contract. Payments are due in full by the published term bill due date each semester or upon receipt of bill from the Office of Residential Life. Checks and money orders are payable to the University of Rhode Island and should be remitted to the Office of the Bursar.

A student vacating his or her assigned quarters before the end of the period under contract will be held responsible for the total charges for the entire period. No refund will be given when a student moves from University quarters to a private home or decides to commute.

All students living in University residence halls are required to purchase a 15-meal contract for three meals a day, Monday through Friday; a 20-meal contract which includes three meals a day, Monday through Saturday and brunch and dinner on Sunday; or a 10-meal (lunch or dinner) five-day contract.

Dining contracts begin on registration day and expire the last day of final examinations. They apply each day on which the University schedules classes or examinations according to the meal plan purchased. Meals are not served on holidays.

Students who require diets for health reasons must have their local physician submit a request for the special diet, with the diet prescribed, to the director of Clinical Services, University Health Services, *each semester*. Special diets for other than health reasons cannot be provided. Students may consult a nutritionist, located in Roosevelt Hall, for special diet information and help with food selections.

Parents and guests of students, faculty and staff members, alumni, and guests of the University may purchase guest meal tickets at the dining rooms, or may use student guest coupons from student meal books. Various meal plans are available for commuting students on a semester contract basis. Information is available at the Dining Services main office in Lippitt Hall.

Meal books are issued at registration and billed according to the contract signed. Only students withdrawing from the University will receive Dining Services refunds. Please refer to scale on page 21.

Indebtedness to the University. Failure to make full payment of all required fees or to resolve other debts to the University (for example, unreturned athletic equipment, overdue short-term or emergency loans, lost library books, debts to the Office of Residential Life for damages, obligations required by the University Judicial System) may result in the cancellation of preregistration for the following semester, denial of registration until the payment is made, and/or disenrollment. Appropriate University departments will provide the student with notice of the debt, reason for it, and a review, if requested. A student must fulfill all financial obligations to the University before receiving transcripts or a diploma.

Student Financial Aid

Financial Aid is money made available from federal, state, local, or private sources which helps students attend the postsecondary institutions of their choice. At the University of Rhode Island, these varied sources are administered by the Student Financial Aid Office in Roosevelt Hall. The financial aid programs are designed to serve students from the widest possible range of society and all students are encouraged to apply.

In most cases, financial aid will be awarded in a "package" of grants (which do *not* have to be repaid), loans, and student employment opportunities (part-time jobs while attending school). The purpose is to assist the students in meeting the costs of attendance at the University. To continue receiving financial aid, it is necessary to re-apply and demonstrate sufficient financial need each year as well as maintain satisfactory academic progress.

Financial aid to students is awarded without regard to age, race, sex, creed, national origin, or handicap.

Determination of Financial Aid. A student does not have to be from a low-income family to qualify for financial aid, but does have to have "financial need." "Need" is the difference between what it costs to attend the University and what the student and family can be expected to contribute from financial resources. Parents, insofar as they are able, are expected to bear primary responsibility for financing their son's or daughter's college education, and the student is also

expected to earn a portion of the resources for college expenses, usually through summer employment.

Eligibility. Only citizens, nationals, or permanent residents of the United States are eligible to apply for financial aid. Foreign students desiring information about financial assistance should contact the Office of International Student Affairs at the University.

To be considered for financial aid, a person must have been accepted and enrolled as a matriculated student at the University. Enrolled students must be making satisfactory progress towards their degree according to the University's policy on satisfactory progress (see p. 23).

Application Procedure. If you are a resident of Rhode Island, Massachusetts, Maine, or New Hampshire, you should complete a Financial Aid Form (FAF), specifically printed for your state. If you are a resident of another state, you should complete the national Financial Aid Form and check with your state scholarship or grant authority to inquire if another form is needed for you to apply for your state scholarship funds. The Undergraduate Student Financial Aid Application will subsequently be mailed to all students whose FAF results have been received by the University. Upperclassmen should pick up the Financial Aid Form at the Student Financial Aid Office. This application should be completed and returned as soon as possible with the documentation requested. Approximately 5-7 weeks after filing the FAF, the applicant will receive a Pell Grant Student Aid Report (SAR). The SAR should be submitted to the Student Financial Aid Office even if the student is ineligible for a Pell Grant.

Application Dates. The FAF should be mailed to the College Scholarship Service in Princeton, New Jersey, after January 1. Awards will be made to students who complete their application for aid on a first come, first served basis with highest-need candidates being given first consideration. Applications will be processed as long as funds remain available.

Federal Aid Available

Pell Grants. The Pell Grant is designed to form the foundation of all financial aid received. Each applicant is mailed a set of Student Aid Reports which must be

forwarded to the Student Financial Aid Office. The amount of the Pell Grant is calculated according to the cost of attendance, the number of credits for which the student enrolls, and the Student Aid Index printed on the Student Aid Report.

Supplemental Educational Opportunity Grant. This program is intended to assist undergraduate students with financial need. These awards are available in amounts ranging from \$200 to \$2,000 per year.

National Direct Student Loan. Eligibility is based on need. Undergraduates are limited to borrowing \$3,000 for the first two years of their program with a maximum of \$6,000 for four years. Graduate students may borrow up to \$12,000 including undergraduate loans. These loans have a simple interest rate of 5% annually. Interest does not accrue until six months after graduation or withdrawal. Minimum payments of \$30 per month are required, and the repayment period may extend up to ten years.

Nursing Student Loan Program. This program is available to students enrolled in the College of Nursing. The long-term, low-interest loans become due and payable should the student leave the nursing program for any reason. The loans are designed to assist financially needy students achieve careers in nursing.

Health Professions Loan Program. This loan program is restricted to students in the College of Pharmacy. Loans are available to all such students with financial need.

College Work-Study Program. This federally supported program provides part-time employment during the school term and full-time employment during the vacation periods. The jobs may be either with University departments, or with off-campus, non-profit, non-sectarian, non-political agencies. Other institutionally funded employment is also available. A list of these jobs is available in the Student Financial Aid Office.

Guaranteed Student Loan Program. Students may apply for loans under the Guaranteed Student Loan Program through local lending institutions. Interest on loans, until six months after graduation or withdrawal, will be paid by the federal government. A simple interest rate varying from 7 to 9% annually is charged once the repayment period begins.

Undergraduate students may borrow up to \$2,500 per year with a maximum of \$12,500. Graduate students may borrow up to \$5,000 per year, with a maximum of \$25,000 including undergraduate loans.

Plus Loans for Higher Education. Independent undergraduates, graduate students, and parents of undergraduate dependent students may apply for loans with annual interest of 12%. Repayment must begin within 60 days after the loan is received. Additional information may be obtained from local lending institutions.

University Aid Available

University Grant. The University provides grants to several hundred in-state students. To be awarded a University Grant, the student must have demonstrated financial need and a satisfactory academic record.

Arthur L. Hardge Memorial Grant. This grant is awarded to economically and socially disadvantaged residents of Rhode Island who participate in the Special Program for Talent Development.

T.A. Suddard International Grant. A limited number of partial tuition awards are made to international students, based on financial need. Recipients are awarded by the International Scholarship Committee.

University Scholarships. Scholarship awards require not only financial need, but evidence of high academic potential. Some scholarships have specific restrictions, such as place of residence, major, class year, etc. A list of available scholarships may be found in the *Undergraduate Bulletin*.

Athletic Grants. These grants are made upon the recommendation of the Athletics Department to athletes who meet the established qualifications. These awards, rather than being based on need, are based upon athletic ability. Students interested in such assistance should contact the Department of Athletics.

Regular Student Employment. Positions funded by the University are available to more than 1,000 students. Jobs are listed in the Student Financial Aid Office.

University Loans. Emergency loans ranging from \$10 to \$100 are available to full-time students. These loans are short-term in nature (14-90 days), and can be made only when there is a means of repayment. Application forms are available in the Student Financial Aid Office.

Other Sources of Aid

Rhode Island State Scholarships and Grants. Undergraduate residents of Rhode Island are encouraged to apply for Rhode Island State Scholarships or Grants. While both are based upon need, the scholarships also require a strong academic record in high school. The Rhode Island State Scholarship and Grant Program is administered by the Rhode Island Higher Education Assistance Authority, 274 Weybosset Street, Providence, Rhode Island. Other states offer similar programs; for more information, contact your state's Scholarship Agency.

There are many additional sources of financial aid available to students who qualify: scholarships from private organizations, clubs, labor unions, fraternities, sororities, and businesses. Students should apply directly to the source if they believe they qualify.

A list of the scholarships and loans may be found on page 181. For veterans' benefits see page 19.

Policy on Satisfactory Academic Progress

The Education Amendments of 1980, P.L. 96-374, October 3, 1980, state: "A student is eligible to receive funds from federal student financial aid programs at an institution of higher education if the student is maintaining satisfactory progress in the course of study he or she is pursuing according to the standards and practices of that institution."

To maintain satisfactory progress at the University of Rhode Island for federal financial aid purposes, the student must be enrolled in a degree-granting program on at least a half-time basis (6 credits for undergraduates, 5 for graduates) for each semester that aid is received. Students enrolled full-time may receive aid for 10 semesters in completing what is normally a four-year program. Students completing what is normally a five-year program are permitted to receive aid for the equivalent of 12 full-time semesters. Part-time students may receive equivalent aid, with an accumulation of 12 credits corresponding to a full-time semester. Two full-time (six credits) summer terms are considered the equivalent of one semester. The determination of a transfer student's eligibility includes the semesters of federal financial aid received prior to attendance at the University of Rhode Island.

Satisfactory progress standards will conform to the University's academic standards, as delineated in the *University Manual*. Students who are placed on academic probation will be notified of the possibility of their loss of federal financial aid eligibility. Students on academic probation for two consecutive semesters and students who are academically dismissed will be ineligible to receive federal financial aid. Criteria for probation and dismissal appear in the *University Manual*. A student who is declared ineligible to receive aid for not maintaining satisfactory academic progress may appeal the decision to the Satisfactory Progress Appeals Committee. Readmission to a program or removal from probation does not automatically constitute eligibility for federal financial aid.

Satisfactory progress will be monitored and measured according to the implementation procedures. Failure to maintain satisfactory progress for two consecutive semesters will result in the loss of federal financial aid eligibility until the student is determined by the Student Financial Aid Office to be once again making satisfactory academic progress.

If there are unusual circumstances which result in the student's inability to make satisfactory progress, the student should write a letter of appeal documenting the unusual circumstance(s) and submit the letter to the Satisfactory Progress Appeals Committee, c/o the Assistant Dean of Student Financial Aid.

Student Life and Services

An enriching college life has a well-balanced mix of academic and extracurricular activities. The University offers a unique blend of student organizations and activities with emphasis on student-run services and businesses.

New Student Orientation

Orientation programs which facilitate the students' entry into the campus community are administered by the Counseling Center. New students are taxed a nominal amount to cover such expenses as room, meals and materials associated with their orientation program.

Summer Orientation Workshops. All students who are beginning University careers attend a two-day workshop to plan their academic programs, to register for fall classes, to learn what to expect of the University, and to begin to acquire the skills essential to successful transition from high school and home to the University community. These programs are planned to personalize the student's first experience with the University as each one participates, with a group of approximately 15 classmates, in workshop projects. Admitted students receive workshop registration materials in May.

Special programs are planned for parents of new students to coincide with some of the workshop dates. Programs are also provided for older or non-traditional students and other students with special needs.



Transfer Orientation Programs. Students transferring to the University from another institution are encouraged to attend workshops planned especially to acquaint them with some of the unique features and procedures of this University. These workshops differ substantially from beginning student programs. They deal with the issues and problems associated with transferring from another educational institution to the University of Rhode Island. Orientation information and reservation materials are mailed separately to students admitted with advanced standing.

Initial Orientation for International Students. Programs just prior to the formal beginning of the academic year assist the international student to function effectively, comfortably, and with reasonable initial success in the new environment. Because successful transition to American culture, values, and institutions as well as to American academic life is crucial, new international students are required to attend the program. Full information regarding arrival dates and orientation program costs are mailed to students in the spring. In planning educational budgets, international students should set aside \$75 to cover cost of room, meals and program expenses. This expense is in addition to University fees specified in this bulletin.

Commuter Student Orientation. A one-day program is held just prior to the start of the fall semester. This special commuter orientation is presented by the Office of Student Life and is designed to address the problems, needs and concerns of new commuter students. Commuter orientation complements the summer orientation workshops and explores commuter-related issues and concerns in more detail.

Life Styles

Residence Halls and Dining Centers. Residence halls and boarding facilities are available to students during both the regular academic year and the summer sessions. There are 18 residence halls on campus offering a variety of living accommodations including coeducational housing. Students registering for rooms in the residence halls will have their applications filled in order of receipt. Room assignments will be to the extent of facilities, and roommate requests will be granted when possible. Freshmen are guaranteed space in residence halls if they send in their housing deposit by May 1. For rates and contracts, see page 21.

Applications for residence hall living should be made to the Director of Residential Life.

Three dining centers are operated by the University for the convenience of resident students. These centers were constructed with private bond funds. To guarantee payment, the University requires all students living in residence halls to purchase a 10-, 15- or 20-meal dining contract as described on page 22.

Fraternities and Sororities. There are approximately 1,300 fraternity and sorority members living in the 23 nationally affiliated houses privately owned by alumni corporations. The staff of the Office of Student Life advises these groups. The Greek houses promote scholarship, citizenship, and small-group living. Purchasing and business management for these houses is provided by a private corporation controlled by the fraternity and sorority members. The average room and board charge for fraternities and sororities is approximately \$400 less than for University residence halls and dining centers. Approximately 175 freshmen live in fraternities and sororities each year.

Interested freshmen should contact the Office of Student Life.

Commuting from Family Home. Approximately 2,000 students commute to the University from home. The advantages of home cooking, privacy, lower costs, and opportunity to keep high school friends are balanced against numerous challenges: acquiring information about all aspects of the University, returning to campus for evening events, transportation problems, and budgeting one's time. Various services are coordinated by the Office of Student Life to meet commuter needs. Dining Services offers special meal plans for commuters; Health Services provides a satellite clinic of preventive services; the Commuter Information and Referral Center, staffed by peer advisers, is a clearinghouse of information providing quick and accurate answers to any questions about University life. A car pool matching service is available in the Memorial Union Commuter Lounge.

Commuting from "Down-the-line." Approximately 2,000 students commute from houses or apartments in the southern Rhode Island area known as "down-the-line." Juniors and seniors often choose to move off campus and live within a ten-mile radius of the campus where summer homes are rented to students for the school year. Typically, a student will pay \$75-100 a month, plus utilities, for each bedroom in a furnished house. The majority of winter residents in these down-the-line summer communities are students and they patronize nearby supermarkets, laundromats, restaurants, shopping centers and recreational facilities. Many commute by car pool or bus. The Office of Student Life administers an off-campus housing service along with the commuter services mentioned above. Most services are located in the Commuter Lounge in the Memorial Union.

Older Students. Approximately 800 students (10% of the undergraduate population) on the Kingston campus are over 25 years of age. There is a student organization called Older Student Association (OSA) for these men and women who chose not to, or were unable to, attend college right after high school. Some are married, with family responsibilities. Some also have jobs and are part-time students. Some older students are attending school with G.I. Bill benefits.

Some have retired from a first career and want to prepare for a second. Older students are encouraged to seek advice from the Admissions Office staff. Programs and services for this group of students are coordinated by the Office of Student Life.

Women Students. Women students make up about half of the student population. A Women's Center, administered by the Office of Student Life, provides specific resources to help women grow to their full potential, and it coordinates lectures, programs, and activities of special interest to women. There are also on campus a Women's Crisis Center and a Women's Collective.

Minority Students. Approximately 600 students use the variety of services for minority students. Black, native American, Asian, Hispanic, and other minority students have formed special interest groups to further meet their needs. A minority student center, the Uhuru SaSa House, serves as a gathering place for leisure, meetings, workshops, and various co-curricular activities. Counseling, programming, and other services are provided by the Director of Minority Student Services in concert with the Office of Student Life.

International Students. More than 400 international undergraduate students, graduate students, and visiting faculty are advised and served by the Office of Student Life. Assistance is provided in the academic, social, financial and immigration areas. All communication from foreign students concerning non-immigrant visas and employment are handled by this office.

Handicapped Students. Approximately 200 students have identified themselves as disabled. A full range of services is offered by the University and conducted by the Office of Student Life. Handicapped students are encouraged to notify the Coordinator of Handicapped Services for individualized services and accommodations.

Student Government

The Student Senate is a legislative body which represents the students to the administration and faculty and supervises

extracurricular activities. It also distributes the activities tax among the various student organizations through its tax committee. Individual residence halls form their own governments. The Interfraternity Council supervises fraternity affairs and the Panhellenic Association governs sorority life. The Commuter Association provides social and other assistance to commuter students.

University Judicial System

Administered by the Office of Student Life, the University Judicial System is designed to promote student growth and to preserve the atmosphere of learning necessary to the well-being of all students. Community standards of behavior and University policies for students are published in the student handbook, *Rampages*. The Judicial System receives complaints or allegations from aggrieved parties, the available facts are gathered and evaluated, and the case may be referred for formal judicial action by one of the University judicial boards or by administrative action (if the student admits guilt and chooses administrative action). Sanctions range from "no further action" to suspension or dismissal from the University and may include conditions relating to the nature of the violation.

Student Activities

More than 120 student organizations are advised by the Student Activities Office staff through consultation services, technical expertise and information. Thousands of students participate in the activities sponsored by these organizations.

Lectures and Arts Programs. Lectures and arts programs are presented throughout the year to enrich the more formal academic program of the University. Lectures of general and specialized interest are presented by visiting scholars. The URI Arts Council plans programs that include music and dance concerts, film programs, and theatre presentations. Student organizations sponsor a popular entertainment series and bring speakers of national or international prominence to campus. These are supported by student funds.

Student-run Businesses. The Student Senate business arm, called Kingston Student Services, controls and operates a variety of student-oriented businesses from a record and film shop in the Memorial Union and the campus youth hostel (primarily for commuters) to a used book exchange. Other student-controlled businesses include the fraternity and sorority cooperative buying service and the various residence hall cooperatives for purchase of food and sundry items, and management, with some full-time help, of the multi-thousand-dollar food services in the Memorial Union.

Athletics. The University offers an extensive program of athletics, sufficiently varied to provide an opportunity for every student to participate. The Tootell Physical Education Center and the Keaney Gymnasium provide excellent facilities, including three pools, three gymnasiums, three weight training rooms, five handball courts, and a modern athletic training room. A multi-purpose indoor athletic complex is planned which will include facilities for track, tennis, gymnastics, weight training, and many other indoor activities. The outdoor facilities include the newly renovated Meade football stadium, 21 tennis courts, two softball diamonds, a baseball field, a lighted soccer field, an all-weather track, a varsity hockey field, and numerous practice fields for recreation and competitive activities.

Women's intercollegiate teams participate in Division I basketball, field hockey, gymnastics, soccer, softball, volleyball, cross country, indoor and outdoor track, swimming and diving, and tennis.

Men's intercollegiate teams participate in Division I-AA football, and in Division I baseball, basketball, golf, soccer, swimming, tennis, cross country, and indoor and outdoor track.

In addition to membership in the Atlantic Ten Conference, the University holds membership in the Yankee Conference (football), the National Collegiate Athletic Association, the Eastern College Athletic Conference, and the New England Intercollegiate Athletic Association.

Intramural programs and clubs for men and women combine the values of competitive athletics and informal sports, and are in operation all year.

Honor Societies. The University has chapters of a number of national honor

societies, election to which is a recognition of accomplishment. The Society of the Sigma Xi is the scientific honor society, Phi Beta Kappa is a national liberal arts honor society, Phi Eta Sigma is a national honor society for freshmen, Phi Kappa Phi is the honor society for general scholarship, and Mortar Board recognizes scholarship and leadership. In more specialized areas are the following: Alpha Delta Sigma (advertising), Alpha Kappa Delta (sociology), Alpha Zeta (agriculture), Beta Alpha Psi (accounting), Beta Gamma Sigma (business), Kappa Delta Pi (education), Delta Pi Epsilon (business education), Eta Kappa Nu (electrical engineering), Lambda Kappa Sigma (women's pharmacy), Lambda Tau (medical technology), Omicron Delta Epsilon (economics), Omicron Nu (home economics), Phi Alpha Theta (history), Phi Sigma (biological science), Phi Sigma Iota (foreign languages, literature, and linguistics), Pi Delta Phi (French), Pi Mu Epsilon (mathematics), Pi Sigma Alpha (political science), Pi Tau Sigma (mechanical engineering), Psi Chi (psychology), Rho Chi (pharmacy), Sigma Delta Pi (Spanish), Sigma Pi Sigma (physics), Sigma Theta Tau (nursing), and Tau Beta Pi (engineering).

Other Organizations. In addition to intercollegiate athletic teams, a number of organizations represent the University in competition, exhibitions, and public performances. The University Band, Chorus, and Orchestra are under music department direction, and students may receive credit for participation in any one of these. The University Theatre, under theatre department direction, presents several plays each year. The URI Debate Council is directed by members of the speech department and participates in intercollegiate debates. The Cheerleaders are active at varsity football and basketball games and rallies.

On campus there are about 30 professional organizations related to the academic areas and there are a number of groups serving social, recreational, cultural, religious, and political interests.

Students publish a newspaper four times a week, a bi-weekly gazette, a yearbook, and a literary publication, and operate WRIU, a local AM and a state-wide FM radio station.

Student Services

Career Services. The Office of Career Services helps students assess goals, develop skills, and implement career objectives. It is staffed by professional counselors and career planning specialists who provide individual counseling, non-credit workshops, career development courses, and campus interviews with a broad range of potential employers. The Career Services staff provides counseling on problems and concerns encountered during selection of college major, career search, and graduate school selection. Career Assistants, undergraduate students who serve as advisers, are available on a daily walk-in basis to help with career inquiries, resumes, job search strategies, and occupational information.

The Career Resources Center maintains publications and information on specific careers, job openings, job search techniques, graduate programs, and employer literature. *Career Steps*, a series of publications prepared by the staff, covers selected topics and is available on request.

Counseling Services. The Counseling Center is staffed by professional counselors, psychologists, and a part-time psychiatrist. It offers short-term individual counseling and a variety of skill-building and support groups to help students cope successfully with life demands. The Counseling Center provides assistance to students in areas such as coping with stress, developing effective study habits, building satisfying relationships, adjusting to university life, and planning for graduate school or a career.

The Counseling Center sponsors: New Student Programs; The Learning Assistance Center; Perspectives, which processes student leaves of absence and counsels students who consider withdrawing from the University; and The Clearinghouse for Structured Groups, a national informational service for professional counselors. It also administers professional examinations such as the Miller Analogies Test, the Graduate Record Examinations, the Law School Admissions Test, and the Graduate Management Admission Test.

University Chaplains. The University chaplains are active in providing religious services, in counseling, advising campus groups, teaching, and programming. The chaplains are available to all students, staff, and faculty on a 24-hour basis.

The six chaplains represent the Roman Catholic, Jewish, Episcopal, and Protestant communities; referrals are available to representatives of other faiths.

Memorial Union. A student board of directors working with the Director of the Memorial Union determines policy for the Union and plans a full program of social, cultural, intellectual and recreational activities. The Union building is a memorial to the men of the University who died in two world wars. It houses a wide variety of educational, social, cultural and recreational services and facilities. These include meeting and conference rooms, lounges, browsing room, study rooms, dark rooms, student video center, radio station, campus newspapers, games room, offices for student organizations, student technical services, clothing store, flower shop, nut shop, cafeteria, snack bar, restaurant, pub, private dining rooms, ballroom and party room.

Among the services provided are a bank, travel agency, unisex hair salon, credit union, and a center where copying facilities and typewriters are available.

Health Services. University health services are available to all students who have paid the health fee. These services include special clinics in gynecology, birth control, internal medicine, surgery, wart removal, allergy, nutrition, and mental health as well as generalist and nursing care, laboratory, X-ray, and pharmacy. Allergy injections are given, provided the vaccines are supplied.

Outpatient services during the academic year are available seven days a week, 24 hours a day. Physicians are available Monday through Friday from 8 a.m. to 8 p.m., and for a weekend clinic. Physicians are on call at other times. Nurses are on duty at all times. Specialists are available only at specified times.

Hospital care is available in the local community. All medical expenses incurred outside the University's Health Services are the responsibility of the student. Therefore, you are encouraged to have adequate insurance coverage (see Health Services brochure, *To Your Health*). Students who choose their own private physician must assume responsibility for expenses incurred.

The Health Promotion Department of Health Services in Roosevelt Hall is concerned with teaching students to take care of themselves and to become informed consumers of health care services.

Confidentiality of Student Records

Procedures for the release and disclosure of student records maintained by the University are in large measure governed by state and federal laws. Where the law is silent, the University is guided by the principle that the privacy of an individual is of great importance and that as much information in a student's file as possible should be disclosed to the student upon request. A current or former student has the right to inspect and review official records, files and data directly related to that student. This right does not extend to applicants, those denied admission to the University or those who were admitted but did not enroll. Some records are not available to students.

Third parties do not have access to personally identifiable records or information pertaining to a student without the written consent of the student who specifies that the records be released. Parents are considered third parties.

Detailed guidelines for the release and disclosure of information from the student records are available from the Office of Student Life. These guidelines comply with the legal requirements of the Family Educational Rights and Privacy Act of 1974.

University College

Diane W. Strommer, *Dean*
Everett T. Harris, *Assistant Dean*
Sarah H. Rockett, *Academic Counselor*

University College offers incoming students a broad range of advising services and the opportunity to explore the variety of courses and programs available at the University before they commit themselves to a major in a degree-granting college. All entering students are enrolled in University College except registered nurses and students in special two-year programs. University College grants no degrees. Through its strong program of academic advising by faculty, its purpose is to assist new students in making a smooth transition to the University and to provide special assistance, programs, and events for freshmen and sophomores.

Advisers, who have regular office hours at the College in Roosevelt Hall, are faculty members who represent each of the majors in the degree-granting colleges. Each student is assigned an academic adviser who is a specialist in the area in which the student intends to major or who has a particular interest in working with students who are undecided about their choice of a major. Advisers help students to select and schedule the right courses, become familiar with University procedures and programs, and obtain whatever assistance may be needed.

If more students seek access to a program than can be accommodated due to limited facilities or faculty, those students who have shown the highest promise for academic success in the program will be admitted first. Where such limitations exist, the student must apply for acceptance in the program under conditions



established by the specific department or college. This applies specifically to programs which have been declared "oversubscribed" by the Vice President for Academic Affairs. Students who cannot be admitted to the program of their first

choice may request entry into another program for which they have satisfied entrance requirements, or spend one or two additional semesters in University College preparing to qualify for another program.



College of Arts and Sciences

Richard J. Gelles, *Dean*
Margaret D. Robb, *Associate Dean*
Calvin B. Peters, *Acting Associate Dean*
Joyce P. Allen, *Assistant Dean*

The College of Arts and Sciences has two main objectives: first, to enable all students to understand our intellectual heritage, the physical and biological world in which we live, and our social, economic, and political development; and second, to provide programs of professional education in selected fields as well as a strong foundation for graduate study.

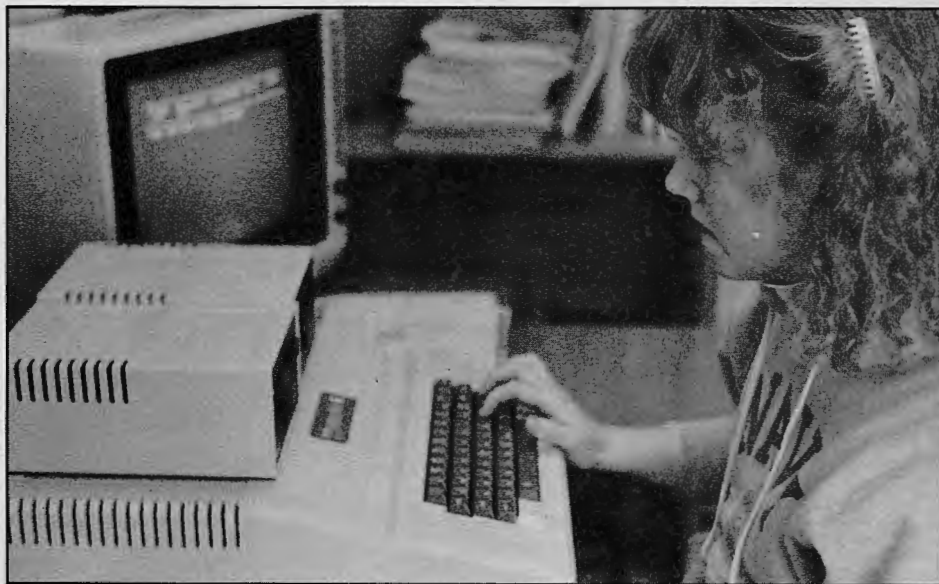
The college has programs of study leading to the following degrees: Bachelor of Arts, Bachelor of Science, Bachelor of Fine Arts, and Bachelor of Music. The Department of Dental Hygiene provides programs leading to both the Bachelor of Science and the Associate in Science degrees.

For information on premedical, pre-dental, prelaw and preveterinary programs see pages 11-13.

Curriculum Requirements

In order to earn a degree in the College of Arts and Sciences, the student must meet requirements in three main areas: 1) the major, 2) electives, 3) General Education. These areas are described below.

1. The Major. Every student is required to specialize in a particular area or discipline; this area of specialization is called the major. The requirements for each major vary from field to field, and are described on pages 31-44. Any student who has met the requirements for two



separate majors within either the Bachelor of Arts or the Bachelor of Science curriculum in the College of Arts and Sciences has earned a double major and may have both fields listed on the transcript. Students in Bachelor of Arts programs must complete a minimum of 42 credits in courses numbered 300 or above.

A student must maintain a 2.0 quality point average (QPA) in his or her major to meet graduation requirements. One-half of the total number of credits needed in a given major must be earned at the University of Rhode Island.

Curricular Modifications. In consultation with the adviser, and with the approval of the department and dean, a student may be permitted to modify the normal requirements of the department in which the student is majoring. Students may modify any curricular requirement except course level, minimum grade point average, total credits, and the Basic Liberal Studies requirements. These may be modified only upon approval by the Scholastic Standing and Petitions Committee of the College. Petition forms are available in the Dean's Office.

2. Electives. Electives are courses not included in the General Education or major requirements which students may freely select in order to make up the total number of credits required for graduation. Many students use their elective credits to develop a minor field (see below).

Minor. Students may elect to declare a minor, which will be entered on their transcripts at graduation. Requirements for a minor may be satisfied by: 1) completion of 18 or more credits of an approved minor, or 2) completion of 18 or more credits within a curriculum other than the student's major, or 3) completion of 18 or more credits of related courses offered by more than one department, with approval by a member of the faculty competent in the minor area of study.

At least 12 of the 18 credits must be at the 200-level or above. Elective courses and courses in General Education may be used for the minor. No course may be used to apply to both the major and minor fields of study. A minimum average of 2.0 must be earned in the courses in the minor. Courses in the minor may not be taken under the pass-fail grading option.

It is the responsibility of students to submit their minors to the dean for approval no later than the beginning of the second semester of their senior year.

3. General Education/Basic Liberal Studies. In the College of Arts and Sciences, General Education requirements are called Basic Liberal Studies, and are required of all students. This series of courses is intended to insure that students have educational experiences which will help them to become informed and responsible participants in society and contribute to the full development of their individual capabilities. The Basic Liberal Studies Program embodies the

philosophy and fundamental knowledge which characterizes an arts and sciences education.

Basic Liberal Studies Requirements. Courses used to fulfill these requirements must be selected from the list approved by the College of Arts and Sciences on this page. Students may use *only one course per discipline* (as identified by course code) to fulfill requirements in Fine Arts and Literature, Letters, Social Sciences, and Natural Sciences, except they may take both parts of an approved designated course sequence. See this page for the list of approved sequences.

Courses in a student's major may not

be used to fulfill requirements in Fine Arts and Literature, Letters, Social Sciences, and Natural Sciences. However, if a student completes a double major, he or she may use courses from one major toward these requirements.

Courses used to fulfill Basic Liberal Studies requirements must be selected from the following list approved by the College of Arts and Sciences.

Fine Arts and Literature (A)

Fine Arts: ART 101, 103, 120, 203, 207, 215, 231, 233, 251, 252, 263, 265, 280, 284, 285, 359, 374; HPR 101; MUS 101, 106, 111; SPE 231; THE 100, 181, 381, 382, 383.

Literature: CLA 394, 395, 396; CLS 160, 250, 335; ENG 160, 241, 242, 243, 245, 246, 251, 252, 263, 264, 265, 280; FRN 327, 328, 391, 392, 393; GER 325, 326, 391, 392; ITL 325, 326, 391, 392, 395; RUS 325, 326, 391, 392; SPA 303, 306, 391, 392.

Letters (L)

HIS 103, 105, 111, 112, 113, 114, 115, 116, 118, 122, 125, 132, 141, 142, 143, 145, 150, 171, 180, 304, 305, 306, 307, 309, 310, 311, 315, 321, 322, 323, 324, 325, 327, 332, 333, 340, 341, 342, 346, 353, 354, 381, 382, 383, 384; HPR 104; PHL 103, 104, 117, 312, 314, 318, 319, 321, 322, 323, 324, 325, 328, 331, 346;

Basic Liberal Studies Requirements

Basic Liberal Studies Requirements

BACHELOR OF ARTS

BACHELOR OF SCIENCE BACHELOR OF FINE ARTS BACHELOR OF MUSIC

Fine Arts and Literature*

9 credits (At least 3 in Fine Arts; at least 3 in Literature)

6 credits (3 in Fine Arts; 3 in Literature)

Letters

9 credits

6 credits

Social Sciences

9 credits

6 credits

Natural Sciences

9 credits

6 credits

Mathematics

3 credits

3 credits

Communication Skills

6 credits (3 must be in a writing course; the other 3 may be in another writing course or may be selected from the general communications courses.)

6 credits (3 must be in a writing course; the other 3 may be in another writing course or may be selected from the general communications courses.)

Foreign Language and Culture

Choose one of the following options:

- Coursework through the intermediate level (104 for modern languages; 302 for classical languages).
- Demonstration of competence through the intermediate level by examination.
- Study abroad in an approved academic program for one semester.

Choose one of the following options:

- Two-course sequence in a language studied for two or more years in high school through at least the 103 level in a modern language or 301 in a classical language.
- Demonstration of competence through the intermediate level by examination or by successful completion of 104 in a modern language or 302 in a classical language.
- Coursework in a language not previously studied (or studied for less than two years in high school) through the beginning level (102).
- Study abroad in an approved academic program.
- Two courses from two different departments selected from within a single culture cluster taken, if possible, in the same or consecutive semesters. See page 9 for a list of approved culture clusters.

*Students in the Comparative Literature Studies program may fulfill the Fine Arts and Literature requirement by taking six credits in Fine Arts and three credits in Literature which are over and above their major requirement.

PSC 240, 341, 342; RLS 111, 125, 126, 131, 227; SPE 200, 205, 210.

Natural Sciences (N)

APG 201; AST 108; AVS 101; BIO 101, 102A; BOT 111, CHM 100, 101, 102, 103, 105, 112, 114, 124, 191, 192; FSN 207; GEL 100, 103, 104, 105, 106; HPR 103; PHY 111, 112, 120, 130, 140, 185, 186, 213, 214, 285, 286; ZOO 111, 286.

Social Sciences (S)

AAF 101, 102; APG 200, 202, 203, 319; ECN 125, 126, 300, 361; EDC 102, 312; ENG 232, 330; FSN 150; GMA 100, 102, 131; HCF 220; HPR 102; LIN 201, 202; NRS 100; PSC 113, 116, 201, 221, 288; PSY 103, 113, 232, 235, 254; REN 105; SOC 100, 102, 204, 206, 210, 212, 214, 216, 224, 238, 241, 242, 316, 330, 336; SPE 220; WMS 200.

Note: The following have been approved as designated course sequences: *Social Sciences:* ECN 125, 126. *Natural Sciences:* CHM 101(102), 112(114); CHM 191, 192; PHY 213, 214.

Mathematics (M)

CSC 201; EST 220; MGS 101, 102; MTH 107, 108, 109, 111, 141, 142.

English Communication

Writing (Cw)—CMS 101; ENG 103; MGT 227; WRT 101, 102, 103, 112, 122, 123, 300, and 333. *General (C)*—CMS 101; PHL 101; SPE 101 and 103.

Course Load. No student may take more than 18 credits per semester without permission from the adviser and the dean.

Graduation. It is the responsibility of the student to be familiar with University and college requirements and to submit a graduation worksheet, signed by his or her adviser, to the Dean's Office. Deadlines for submission are as follows:

May Graduation — November 1
August Graduation — April 1
December Graduation — August 1

Bachelor of Arts

The Bachelor of Arts curriculums provide a general cultural background and an opportunity to major in any one of 31 fields of study.

Curriculum Requirements. Each candidate for a Bachelor of Arts degree must meet certain minimum curricular requirements in quantity and quality. These requirements include: at least 120 passed credits which include at least 42 credits in courses numbered 300 or above, and an overall quality point average of at least 2.0.

In addition to meeting the requirements of the Basic Liberal Studies Program, each candidate must complete a major and a number of elective courses. The major totals 27 to 30 credits.

B.A. Major. The major is the discipline or subject area in which the degree is granted. It may include not only required courses within the major department but also courses in related subjects. The student should declare this major before the end of the fourth semester.

The major comprises no fewer than 27 nor more than 30 credits. These, however, are exclusive of any credits which are outside the major department but may be required by that department as prerequisites. Including such prerequisites, the major may not exceed 36 credits.

The student may earn up to 45 credits in coursework offered by the major department, counting as electives those credits earned in excess of the major requirements. Any credits in excess of 45 earned in the major department increase correspondingly the minimum number of credits required for graduation.

Majors include: anthropology, art (history and studio), biology, chemistry, classical studies, comparative literature studies, economics, English, French, geography and marine affairs, geology, German, history, Italian, journalism, Latin American studies, linguistics, mathematics, music, philosophy, physics, political science, psychology, Russian, sociology, Spanish, speech, theatre, urban affairs (urban social processes, policy formation, and spatial development), and women's studies.

Bachelor of Science

The Bachelor of Science curriculums are professionally oriented and, in general, meet the accreditation standards of national professional associations.

Curriculum Requirements. All candidates for the Bachelor of Science degree

must fulfill the requirements of the Basic Liberal Studies Program and complete a major of 30-45¹ credits within a department. In addition, a department may require for its major certain courses in other departments, with the stipulation that this will not preclude their application to the Basic Liberal Studies Program requirements. No more than 130 credits can be required in a program.

Each major within the B.S. curriculum has certain more specific requirements, as listed on the following pages.

Majors include: botany, chemistry, computer science, dental hygiene, geology, mathematics, medical technology, microbiology, physics, zoology.

Bachelor of Fine Arts

The curriculums provide the opportunity to discover and develop creative capacities in the fine arts. The emphasis is on richness of program and quality of experience rather than the development of isolated skills. Applicants registering for work toward the Bachelor of Fine Arts degree must receive permission of their major department. Students majoring in theatre specializing in scene design must submit portfolios. Theatre students who wish to specialize in acting must arrange for an audition with the Department of Theatre. Others must arrange for an interview with a departmental representative. Further details and appointments may be obtained through the University Admissions Office.

Curriculum Requirements. All candidates for the Bachelor of Fine Arts degree are required to meet the requirements of the Basic Liberal Studies Program.

Majors include: art, theatre.

Bachelor of Music

The Bachelor of Music degree is designed to prepare qualified students for careers in the field of music. Students

¹The student majoring in chemistry, for ACS accreditation purposes, will be allowed 48 credits.

may select one of the eight majors dependent upon their aims and abilities.

Curriculum Requirements. All candidates for the Bachelor of Music degree are required to meet the requirements of the Basic Liberal Studies Program.

Students are encouraged to attend department-sponsored events each semester.

Majors include: classical guitar, voice, piano or organ, orchestral instrument, music history and literature, theory and composition, music education.

All areas provide for a good background in academic subjects and each curriculum contains basic courses for the development of sound musicianship. An audition conducted by members of the music department staff is required for permission to register for work toward the Bachelor of Music degree.

The music education curriculum includes courses in educational psychology, methods, and a teaching internship which leads to state certification for teachers.

The total number of credits for graduation is 125 (126 for music education majors).

Associate in Science

The Department of Dental Hygiene offers a two-year program leading to the Associate in Science degree. Students in this curriculum are not required to meet the Basic Liberal Studies Program requirements but must complete 71 credit hours in a prescribed program outlined in the department offerings.

Anthropology

The Department of Sociology and Anthropology offers the degree of Bachelor of Arts (B.A.) in anthropology.

Faculty: Professor Carroll, *chairperson*. Professors Loy, Poggie, Pollnac and Turnbaugh; Assistant Professors Kelley and Lynch.

Students desiring to major in anthropology must complete a total of 30 credits in that subject. This total must include at least one course (3 crs.) from each of the five sub-disciplines of anthropology as follows: *Cultural Anthropology* includes APG 203, 309, 321, 322, 323, 324, 326, 405, 407, and 413; *Culture Areas* includes

APG 305, 311, 313, 315, 319, and 325; *Physical Anthropology* includes APG 201, 300, 301, 350, 390, 400, and 412; *Archaeology* includes APG 202, 303 and 317; *Anthropological Linguistics* includes APG 200 and 409.

In addition, each student majoring in anthropology must complete APG 401 and one of the following methodology courses: APG 300, 301, 302, 317 or 409. The remaining 9 credits may be selected from course offerings in anthropology.

It is recommended that the first course in each sub-discipline be at the 200 level. These 200-level courses are prerequisites for upper division courses in the sub-disciplines, although prerequisites may be waived by the instructor.

It is strongly recommended, but not required, that anthropology majors take at least one course in statistics.

A total of 120 credits is required for graduation.

Art

The Department of Art offers a Bachelor of Arts (B.A.) degree with a major in either art history or art studio, and a Bachelor of Fine Arts (B.F.A.) degree in studio.

Faculty: Associate Professor Roworth, *chairperson*. Professors Calabrò, Fraenkel, Kampen, Keller, Ketner, Klenk, Leete, Parker, and Rohm; Associate Professors Holmes, Onorato, and Richman.

BACHELOR OF ARTS

Art History. It is recommended that students intending to major in art history plan to complete a minimum of 6 credits in the history of art by the end of the sophomore year. For graduation, students must complete 30 credits (maximum 45 credits) in art history, including ART 251 and 252 (6), 354 (3), 356 (3), 359 (3), 363 (3) and 365 (3). An additional 3 credits are taken from any 200- or 300-level course in art history. An additional 6 credits must be selected from ART 461, 462, 469, 470, 480, 484. Studio courses in art are not to be considered part of the art history major and may be used as free electives.

It is recommended that students majoring in art history achieve intermediate level proficiency in at least one foreign language. Students anticipating graduate

study in art history may need proficiency in a second foreign language. Students are also encouraged to enroll in courses in art studio, history, literature, music, and philosophy.

A total of 120 credits is required for graduation. Students must fulfill the requirements of the Basic Liberal Studies Program and take 30-45 credits in art history. Students may use courses in art studio as electives. Of the 120 credits required for graduation, 42 credits must be numbered 300 or above.

Art Studio. It is recommended that students intending to major in art studio plan to complete a minimum of 9 credits in studio by the end of the sophomore year. For graduation, a minimum of 30 credits in art (maximum 45 credits) must be completed, including: studio courses ART 101, 103, and 207; art history courses ART 251, 252, and one art history elective.

An additional 6 credits must be selected from 200 level studio courses (except 203 and 208), and an additional 6 credits must be selected from 300 and 400 level studio courses (except 309 and 310). Art history credits taken in addition to the 9 required are not to be considered as part of the art studio major and may be taken as free electives.

It is recommended that art majors elect at least 3 credits in the allied fields of music or theatre.

A total of 120 credits is required for graduation. Students must fulfill the requirements of the Basic Liberal Studies Program and take 21-36 credits in art studio and 9 credits in art history. Students may use additional courses in art history as electives. Of the 120 credits required for graduation, 42 credits must be numbered 300 or above.

BACHELOR OF FINE ARTS

It is recommended that students intending to enter the B.F.A. program in art plan to complete ART 120 in the freshman year and to have completed an additional 3 credits in art history and a minimum of 24 credits in studio by the end of the sophomore year.

Students in the B.F.A. program must complete a minimum of 72 credits in art. Studio courses required of all majors include: ART 101 (3), 103 (3), 207 (3), 208 (3), either 213 or 215 (3), 405 (3), and 406 (3).

An additional 12 credits must be selected from 200-level studio courses, and an additional 21 credits must be selected from 300-level studio courses.

ART 120 is required of all students and an additional 9 credits must be selected in art history, 3 credits of which must be numbered 300 or above.

An additional 6 credits of art electives must be selected at the 300 level or above in either studio or art history.

A minimum of 120 credits is required for graduation, including the following: major requirements in studio (54), art history (12), studio and/or art history electives (6). Students must meet the requirements of the Basic Liberal Studies Program.

Biological Sciences

Programs in biological sciences are administered by the Departments of Botany, Microbiology, and Zoology. A student may earn either the Bachelor of Arts (B.A.) degree in biology or the Bachelor of Science (B.S.) degree in botany, microbiology, or zoology. The Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees, also offered by these departments, are described in the *Graduate School Bulletin*.

Botany Faculty: Professor Goos, *chairperson*. Professors Albert, Beckman, Harlin, Hauke, Smayda and Swift; Associate Professors Hargraves, Killingbeck, Koske, Mottinger and Sheath; Adjunct Professors Dougall and Steele; Adjunct Assistant Professor Peckol; Emeritus Professors Caroselli, Lepper, and Palmatier.

Microbiology Faculty: Professor N.P. Wood, *chairperson*. Professors Cabelli, P.S. Cohen, H.W. Fisher, Laux, Sieburth and Traxler; Associate Professors Hufnagel, and Sperry; Assistant Professor Nelson; Adjunct Professor Ennis; Adjunct Associate Professor Prager; Emeritus Professor Carpenter.

Zoology Faculty: Professor Wilde, *chairperson*. Professors Cobb, Costantino (on leave 1985-86), Goertemiller, Hammen, Heppner, Hill, K.E. Hyland, Salla, Shoop, and Winn; Associate Professors Bibb, Bullock, Goldsmith, Hairston, Kass, Krueger (on leave spring 1986), and Mottinger; Assistant Professor Specker; Adjunct Professors Bliss, Gibbs, Lions, Miller, and Tilly; Emeritus Professors

DeWolf, Harrison, and Zinn; Emeritus Associate Professor Mathewson.

BACHELOR OF ARTS

Students selecting a major in biology must complete a minimum of 28 credits in biological sciences including the following basic courses: BIO 101 and 102 or BOT 111 and ZOO 111 (6-8), MIC 211 (4), plus BOT electives (6), and ZOO electives (6).

The remaining 4-6 credits may be selected from courses in botany, microbiology, or zoology. Students in this major must elect a year of chemistry. Those wishing to prepare for a professional career in the life sciences should enroll in a bachelor of science curriculum described below.

Students must declare their major when leaving University College.

BACHELOR OF SCIENCE

This curriculum provides specialization in the fundamental principles of botany, microbiology, or zoology, and is concerned with the application of biological science to problems of modern life. It also provides preparation for graduate work in biological fields including aquatic, environmental and marine biology, molecular, cellular and developmental biology, biological oceanography, genetics, immunology, and limnology, and for admission to professional schools of medicine, dentistry, and veterinary medicine.

Students who know their professional goals are encouraged to declare their major as soon as possible in order to take advantage of skilled advising in botany, microbiology, or zoology. Students *must* declare their major when leaving University College.

Each concentration requires a total of 130 credits.

Freshman Year

First semester: 17 credits

BOT 111 or ZOO 111 (4), CHM 101, 102 or 103, 105 (4), MTH 109 or 141 (3), modern language or elective (3), and general education requirement or free elective (3).

Freshman Year

Second semester: 17 credits

BOT 111 or ZOO 111 (4), CHM 112, 114 (4), MTH 141 or 142² (3), modern lan-

guage or elective (3), and general education requirement or free elective (3).

Sophomore Year

First semester: 16 credits

MIC 211 (4)³, CHM 227 (3), and 9 credits of general education requirements or free electives⁴ for a total of 17 credits.

Sophomore Year

Second semester: 17-18 credits

Curriculum requirement (3-4), general education requirements or free electives (9), and the remaining chemistry requirements CHM 226⁵, 228 (5).

Botany. A minimum of 30 credits in botany is required and must include BOT 111, 221, 245, 262. The remaining 17 credits will be selected to complete a particular subdisciplinary path. In addition, the student must take MIC 211; CHM 101, 102, or 103, 105, 112, 114, 226⁵, 227, 228 or 124, 126 and BCP 311; PHY 213, 285, 214, 286 or 111 and 112; ZOO 111; WRT 101; SPE 101; MTH 141; CSC 201 or MTH 142; a modern language is recommended.

Students are strongly urged to consult faculty advisers to obtain guidance on the various sub-disciplinary paths available.

Microbiology. A minimum of 30 credits in microbiology is required, including MIC 411 and 495 or 496. The student majoring in microbiology may include any course in microbiology; BOT 355, 432, 534, 542; PCG 536; ZOO 327, 331, 341 and 512. A student who plans to attend graduate school is advised to take MTH 141 and 142, and BCP 435. In addition the student must take BOT 111 and 352; ZOO 111; CHM 101, 102, or 103, 105, 112, 114, 226⁶, 227, 228, and 212; BCP 311; PHY 213, 285, 214, and 286 or 111, 185, 112, and 186; MTH 109 or 141 and 141 or 142; and one semester of a modern language at the intermediate level.

²MTH 142 is required of zoology and is an optional requirement for botany majors.

³Not required of zoology majors.

⁴Botany and zoology majors are strongly advised to begin taking required major courses at this time.

⁵CHM 229, 230, which is offered in summer only, may be substituted for CHM 226.

⁶Students can take CHM 101(2), CHM 112(4), and 212 instead of 191-192.

Zoology. A minimum of 30 credits in zoology is required and must include ZOO 221, 254, 262, 316, 341 or 345 and 395; ASP or BOT 352. In addition, the student must take BOT 111; CHM 101, 102 or 103, 105; CHM 112, 114, 226⁵, 227, 228; MTH 141, 142; PHY 111, 185, 112 and 186 or PHY 213, 285, 214, 286; and a modern language through the intermediate level. ZOO 111 is not required for a major in zoology but may be applied toward the 30 hours required. Students are encouraged to become involved in the department's varied research activities. Concentration or elective credit is available to qualified students.

Students are strongly urged to consult the zoology advisers and obtain from them detailed programs of the various sub-disciplinary paths through the department most suited to their particular career goals.

Chemistry

The Department of Chemistry offers a Bachelor of Arts (B.A.) degree and a Bachelor of Science (B.S.) degree. The Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees in chemistry are described in the *Graduate School Bulletin*.

Faculty: Professor Fasching, *chairperson*. Professors Abell, C.W. Brown, P.R. Brown, Cheer, Goodman, Kirschenbaum, W. H. Nelson, Rosen, Rosie, and Vittimberga; Associate Professors Forcé, Freeman, and Yang; Assistant Professors Durand and Euler.

BACHELOR OF ARTS

Students selecting this field must complete 28-30 credits in chemistry by taking either 12 credits as CHM 101 and 102, 112 and 114, 212; or 10 credits as CHM 191 and 192; and 18 credits as CHM 227 and 228, and 226, 431, and 432, 335 and 336. CHM 229, 230, which is offered in summer only, may be substituted for CHM 226. CHM 291, 292 may be substituted for the CHM 226, 227, 228 sequence.

MTH 141 and 142, one year of physics (PHY 111, 185, 112 and 186 or PHY 213, 214, 285, and 286) are required and one semester of English composition (WRT 101 or 102) is strongly recommended.

A total of 120 credits is required for graduation.

BACHELOR OF SCIENCE

Designed to prepare the student for a career in chemistry, this curriculum provides a thorough training in both theories and practices in the fields of analytical, physical, organic and inorganic chemistry. Those who complete this curriculum are prepared to continue with graduate study leading to an advanced degree, to teach or to enter specialized fields in development, control, technical sales, and research either in the chemical industry or in industries involving chemical processes.

The curriculum has been approved by the American Chemical Society Committee on the Professional Training of Chemists. Graduates receive a certification card issued by the society and are eligible for senior membership after two years of experience in the field of chemistry. It is strongly recommended that WRT 101 or 102 be taken in the freshman year. CHM 412, 414 should be taken in the junior year by students planning research or advanced coursework in analytical chemistry. CHM 425, 427 should be taken in the junior year by students planning research or advanced coursework in organic chemistry.

The bachelor of science program requires 130 credits.

This sample program can easily be adapted for transfer students and premed, prevet programs.

Freshman Year

First semester: 17 credits

CHM 191 (5)⁶, MTH 141 (3), language⁷ or free elective (3), general education electives (6).

Freshman Year

Second semester: 17 credits

CHM 192 (5)⁶, MTH 142 (3), language⁷ or free elective (3), general education electives (6).

Sophomore Year

First semester: 17 credits

CHM 291 (4), MTH 243 (3), PHY 213 (3) and 285 (1), language⁷ or general education elective (3), general education elective (3).

Sophomore Year

Second semester: 17 credits

CHM 292 (4), MTH 244 (3), PHY 214 (3)

and 286 (1), language⁷ or general education elective (3), general education elective (3).

Junior Year⁸

First semester: 14 credits

CHM 431 (3), 335 (2), physics elective (3), general education elective (3), free elective (3).

Junior Year⁸

Second semester: 17 credits

CHM 432 (3), 336 (2), general education electives (6), free electives (6).

Senior Year

First semester: 16 credits

CHM 401 (3), 425 (2), 427 (3), curriculum⁹ requirements (3-5), free electives (5-3).

Senior Year

Second semester: 15 credits

CHM 392 (1), 412 (3), 414 (2), curriculum⁹ requirement (3-0), free electives (6-9).

Classical Studies

The Department of Languages offers the Bachelor of Arts (B.A.) degree with a concentration in classical studies.

Students selecting classical studies as a major complete a minimum of 30 credits; (a) 18 credits from either LAT 301, 302, 497, 498, or GRK 301, 302, 497, 498; (b) 6 credits from the other language at any level; (c) 6 additional credits from any courses offered by the Classics Section. Either LAT 101, 102 or GRK 101, 102 sequence may count toward the major; the other 100-level sequence, not counting toward the major, will serve as a prerequisite for advanced courses.

A total of 120 credits is required for graduation.

⁵CHM 229, 230, which is offered in summer only, may be substituted for CHM 226.

⁶Students can take CHM 101(2), CHM 112(4), and 212 instead of 191-192.

⁷Students planning to attend graduate school should take Russian or German through the intermediate level.

⁸See comments above concerning CHM 425, 427, 412, 414.

⁹CHM 353, 354 or, with permission of department, any 500-level chemistry course.

Comparative Literature Studies

The Department of English and the Department of Languages offer jointly the Bachelor of Arts (B.A.) degree in comparative literature. The Master of Arts (M.A.) degree is described in the *Graduate School Bulletin*.

Coordinator: Associate Professor Dvorak (English)

The choice of courses in a student's major and in the area of special interest must have both sufficient range (genre, period, and at least two literatures) and a specific focus. It must be approved by an adviser and the Comparative Literature Advisory Committee consisting of members from the Departments of English and Languages.

A total of 120 credits is required for graduation.

Students in the Comparative Literature Studies fulfill the Fine Arts and Literature requirement by taking 6 credits in Fine Arts and 3 credits in Literature which are over and above their major requirement.

Students must complete a minimum of 30 credits in one of the three major options:

English and one foreign literature in the original language. 9 credits in English and/or American literature, 300 level or above; 9 credits in one foreign literature; 3 credits in literary theory or criticism (CLS 350). The remaining credits to be taken from the comparative literature core courses or the literature courses in the Departments of English or Languages.

Two foreign literatures in the original language. 9 credits in each of two foreign literatures; 3 credits in literary theory or criticism (CLS 350). The remaining courses to be taken from the comparative literature core courses or the literature courses in the Departments of English or Languages.

World literature in English translation. 3 credits in the nature of language from APG 200, 409; LIN 201, 202; or PHL 440; 3 credits in literary theory or criticism (CLS 350). The remaining credits to be taken from the comparative literature core courses and the literature courses in the Department of English, and the literature in English translation courses offered by the Departments of English and

Languages. In addition, a student choosing this option must have proficiency in a foreign language through the intermediate level.

A total of 120 credits is required for graduation.

Computer Science and Experimental Statistics

The Department of Computer Science and Experimental Statistics offers the Bachelor of Science (B.S.) degree in computer science. The Master of Science (M.S.) degree programs in computer science or statistics and the Doctor of Philosophy (Ph.D.) in applied mathematical sciences with specialization in computer science or statistics are described in the *Graduate School Bulletin*.

Faculty: Associate Professor Lamagna, *chairperson*. Professors Bass, Carney, and Heltshe; Associate Professors Carrano, Hanumara, Lawing, Soh, and Weiderman; Assistant Professor Peck; Adjunct Professors Arnold and Vicchione; Emeriti Professors Hemmerle, Merenda, and L.T. Smith.

The curriculum is designed to provide a broad introduction to computer science fundamentals. Emphasis is on computer software and applications. The required mathematics preparation provides a basis for advanced work. Students will be well prepared for graduate study in computer science or computer-related areas.

Demand for computer science has far exceeded the department's resources. Therefore, the number of students majoring in computer science enrolled in the College of Arts and Sciences will be limited to 35 per year. University College students and students in other curriculums will be considered for admission to the College of Arts and Sciences as computer science majors each January. Selection will be based primarily upon grade point average.

A registration priority is in effect for all computer science courses. Preference is given to computer science majors, followed by students whose curriculum requires computer science, followed by all others. Students who have preregistered for computer science courses will be given preference, within the above constraints, regardless of their curriculum. Therefore, preregistration is strongly recommended.

Students in this curriculum must complete a minimum of 39 credits in the major as follows:

CSC 201 (3), 202 (3), 340 (3), 301 (3), 311 (3), 431 (3); also 21 additional credits chosen from EST 409, ELE 405 and any CSC course at the 300 level or above (excluding special topics and directed study).

In addition, 12 credits of professional electives are required. The courses must be selected from a list which is available from the department.

Also required are MTH 141 (3), 142 (3), 215 (3), 243 (3); one SPE course (3) and one WRT course (3) or CMS 101 (6).

A total of 130 credits is required for graduation. A possible course of studies follows:

First Year

First semester: 15 credits

MTH 141 (3), WRT 101 (3), general education or electives (9).

First Year

Second semester: 15 credits

CSC 201 (3), MTH 142 (3), SPE 101 (3), general education or electives (6).

Second Year

First semester: 15 credits

CSC 202 (3), MTH 243 (3), general education or electives (9).

Second Year

Second semester: 15 credits

CSC 301 (3), 340 (3), MTH 215 (3), general education or electives (6).

Third Year

First semester: 18 credits

CSC 311 (3), major (6) (e.g. CSC 302, 320, EST 409), professional electives (3), general education or electives (6).

Third Year

Second semester: 17 credits

Major (6) (e.g. CSC 350, 406, 411), professional electives (3), general education or electives (8).

Fourth Year

First semester: 18 credits

CSC 431 (3), major (3) (e.g. CSC 416, 447), professional electives (3), general education or electives (9).

Fourth Year

Second semester: 17 credits

Major (6) (e.g. CSC 412, ELE 405), professional electives (3), general education or electives (8).

Dental Hygiene

The Department of Dental Hygiene offers a four-year program leading to the Bachelor of Science (B.S.) degree and a two-year program leading to the Associate in Science (A.S.) degree. Both are accredited by the Commission on Dental Accreditation.

Faculty: Professor B. Wilson, *chairperson*. Assistant Professors B. Brown and S. Saunders; Adjunct Professors P. Aschaffenburg, A. Carlotti, Jr. and J. Yacovone; Clinical Instructors S. Bauder, F. Bliss, J. Carroccia, J. Feldman, R. George, E. Hart, H. Howarth, A. J. Kershaw, B. Kilcline, D. Markowski, J. Mullane, D. Persechino, S. Ross, J. Schwab, and J. Tompkins.

BACHELOR OF SCIENCE

This curriculum offers maximum flexibility in providing professionally oriented study and a foundation in General Education. It is designed to prepare the students to assume responsible positions in education, such as in schools of dental hygiene, hospital programs, and school systems as well as private practice. Students who complete this curriculum are prepared to continue with graduate study.

Upon completion of the required 71 credits in dental hygiene, the student is awarded the Associate in Science degree. A total of 125 credits is required for the Bachelor of Science degree. At the completion of the first clinical year, students are placed in private dental offices for one month of field training experience.

The required professional courses are made up of the elements which contribute directly to the skill and understanding of dental hygiene and are required in the professional sequence.

A major of 30 credits in dental hygiene includes: DHY 101 (1), 125 (3), 135 (1), 141 (1), 126 (3), 128 (1), 136 (2), 227 (3), 231 (2), 237 (2), 238 (2), 244 (1), 248 (2), 250 (2), 252 (2), 260 (2).

In addition, candidates for the Bachelor of Science degree are required to take the following: CHM 101, 102 or 103, 105 (4), 124 (3), 126 (1), WRT 101 (3), 102 (3), ZOO 121 (4), 242 (3), 244 (1), HLT 172 (1), MIC 201 (4), SOC 100 (3), 204 (3), FSN 207 (3), PCL 221 (2), PSY 113 (3), 232 (3), SPE 101 (3), EDC 102 (3), 312 (3), 372 (3), MTH 107 (3); DHY 462 (3) and DHY 464 (3) are strongly recommended.

ASSOCIATE IN SCIENCE

This two-year curriculum of 71 credits prepares the student to perform ancillary clinical services which contribute to the maintenance of good oral health, educate both children and adults in oral hygiene, and assist the dentist to allow him more time for the treatment of patients.

The program is designed to allow transfer students from other colleges and curriculums to attain the Associate in Science degree. Two months of experience as a dental assistant is recommended for all students entering the dental hygiene program. At the completion of the first clinical year, the student is placed in a private dental office for one month of field training experience.

Freshman Year

First semester: 17 credits

CHM 101, 102 or 103, 105 (4), WRT 101 (3), ZOO 121 (4), DHY 101 (1), 125 (3), 135 (1), and 141 (1).

Freshman Year

Second semester: 18 credits

WRT 102 (3), CHM 124 (3), 126 (1), ZOO 242 (3), 244 (1), HLT 172 (1), DHY 126 (3), 128 (1), and 136 (2).

Sophomore Year

First semester: 19 credits

MIC 201 (4), SOC 100 (3), FSN 207 (3), PCL 221 (2), DHY 227 (3), 231 (2), and 237 (2).

Sophomore Year

Second semester: 17 credits

PSY 113 (3), SPE 101 (3), DHY 238 (2), 244 (1), 248 (2), 250 (2), 252 (2), and 260 (2).

Economics

The Department of Economics offers a Bachelor of Arts (B.A.) degree and a Master of Arts (M.A.) in economics.

Faculty: Associate Professor Starkey, *chairperson*. Professors Hellman and Rayack; Associate Professors Barnett, Mead, Ramsay, and Suzawa; Assistant Professors Burkett, Lardaro, Latos, and Ramstad.

Students selecting this field must complete a minimum of 30 credits in economics, including ECN 125 and 126 (6), 361 (3), 327, 328 (6), and at least one

quantitative course—374 (3), 375 (3), 376 (3).

In addition, at least 12 credits must be completed from economics courses numbered 300 or above. Students may substitute up to six credits from other departments; three credits from statistics—MGS 201 (3), 202 (3), EST 408 (3), 409 (3), or 412 (3)—and three credits from another related course approved by the department chairman.

Students planning to do graduate work in economics are encouraged to take ECN 375, 376 and at least one semester of statistics.

A total of 120 credits is required for graduation.

English

The Department of English offers a Bachelor of Arts (B.A.) degree. The Master of Arts (M.A.) and Doctor of Philosophy (Ph.D.) programs in English are described in the *Graduate School Bulletin*.

The Department of English offers jointly with the Languages Department the Bachelor of Arts degree in comparative literature studies (see p. 35).

Faculty: Associate Professor Reaves, *chairperson*. Professors Campbell, Donnelly, Goldman, Gullason, Kunz, MacLaine, J. M. Marshall, Mathews, Neuse, Pearlman, Petrie, Potter, Seigel, Stineback, Towers and S. White; Associate Professors Arakelian, Barker, Cane, Cuddy, Dvorak, M. Hills, Jacobs, Leo, Malina, Martin, McCabe, C.M. Murphy, Schoonover, Schwegler, K. Stein, Swan, R.H. Tutt and R.M. Tutt; Assistant Professors Badejo, Burke, Mensel, Shamoan, and Vaughn; Adjunct Professor Strommer.

Students selecting this field must complete a minimum of 30 credits in English, including ENG 251 and 252.

The other remaining credits will be determined by the student in continuing consultation with the departmental advisers.

A total of 120 credits is required for graduation.

French

The Department of Languages offers the Bachelor of Arts (B.A.) degree with a concentration in French. The Master of Arts (M.A.) program in French is described in the *Graduate School Bulletin*.

Faculty: Associate Professor Chartier, *section head*. Professors Porter, Rogers, Rothschild, and Waters; Associate Professors Hyland, Kuhn, Morello, and Toloudis; Assistant Professor Driver.

Students selecting this field are required to complete at least 30 credits in French not including FRN 101, 102, 131, 391, 392, 393, or 394. They may elect either a language-civilization option requiring 6 credits in civilization and a minimum of 6 credits in literature or a language-literature option with a minimum of 9 credits in literature. Courses in literature may be selected from among FRN 325, 326, courses at the 400 level, and, with permission of the instructor, courses at the 500 level.

Additionally, students of proven competence in French language and literature, with permission of the adviser, the section head, the department chairperson and the dean of the college, may take courses in related fields such as history, linguistics, art, or philosophy toward their concentration.

Students in secondary education with an academic sequence in French (see page 65) cannot count FRN 101, 102, 131, 391, 392, 393, 394, or any course in linguistics other than 201 which may be taken if approved by the French Studies Section.

A total of 120 credits is required for graduation.

Geography and Marine Affairs

The Department of Geography and Marine Affairs offers the Bachelor of Arts (B.A.) degree. The Master of Arts (M.A.) program in geography, Master of Marine Affairs (M.M.A.), and Master of Arts in Marine Affairs (M.A.M.A.) programs are described in the *Graduate School Bulletin*.

Faculty: Professor Juda, *chairperson*. Professors Alexander and Michel; Associate Professor West; Assistant Professors Burroughs, Krausse, Marti, and Nixon.

Students selecting this field are required to complete at least 30 credits in accordance with the following distribution: two of the following courses (6 credits) GMA 100, 102, 103, 131; all of the following (18 credits) GMA 210, 410, 421, 461, 482 and OCG 401; and two of the following (6 credits) GMA 312, 413, 422, 432, 471, 472, 491, 492.

A total of 120 credits is required for graduation.

Geology

The Department of Geology offers a Bachelor of Arts (B.A.) degree and a Bachelor of Science (B.S.) degree. The Master of Science (M.S.) degree in geology is described in the *Graduate School Bulletin*.

Faculty: Professor Cain, *chairperson*. Professors, J.J. Fisher and Hermes; Associate Professors J.C. Boothroyd, and Frohlich; Assistant Professor Murray.

BACHELOR OF ARTS

Students selecting this field must complete a minimum of 30 credits in geology, including GEL 103 (3), 106 (1) and 104 (3). GEL 105 normally may not be included.

The B.A. curriculum provides more flexibility than the B.S. program in the choice of courses and offers the possibility of highly individualized programs in consultation with the faculty adviser. The B.A. curriculum can provide an appropriate background for geology-related fields dealing with natural resources, engineering geology, environmental studies, conservation, resource management, and others. Students intending to pursue graduate studies in the geosciences should consider the B.S. curriculum in geology or complement the B.A. program with a broad background in basic sciences. The federal government identifies GEL 320, 321, 370, 410, 440, 450, and supporting sciences as a minimum background for geologists.

Students interested in earth science teaching should contact the Department of Geology for details of a cooperative program with the Department of Education.

A total of 120 credits is required in the B.A. program.

BACHELOR OF SCIENCE

This curriculum is designed as a basic foundation for careers in the earth sciences. It offers preparation for further work in areas such as sedimentology, coastal geology, petrology, geochemistry, structural geology, tectonics, geophysics, paleontology, paleoecology, geohydrology,

remote sensing, mineral and energy resources, engineering geology, environmental geology, and oceanography.

An emphasis on marine geology is possible by taking, in addition to marine-oriented geology courses, approved geology-related courses offered by the Graduate School of Oceanography and the Department of Ocean Engineering as science electives. Information about this and other similar options can be obtained from the chairperson of the department.

Students majoring in geology should note the requirement for field experience. An approved summer field camp for a minimum of 4 credits normally is undertaken following the junior year, and related costs are the responsibility of the student. Minimum background for field camp normally includes GEL 320, 321, 370 and 450. (Field camp is not required under the B.A. curriculum.)

A total of 126 credits is required for graduation. Following is the suggested sequence of courses for the first four semesters. Completion of these courses fulfills the Natural Sciences and Mathematics Division requirements and satisfies prerequisites for upper-division geology courses. Late concentrators, transfer students and others wishing to modify this schedule should consult their geology faculty adviser.

Freshman Year

First semester: 16-17 credits

MTH 141 (3), GEL 103 (3), 106 (1), BOT 111 or BIO 101 (4-3), and general education requirements (6). (Students may take MTH 111 before taking MTH 141.)

Freshman Year

Second semester: 15-16 credits

MTH 142 (3), GEL 104 (3), ZOO 111 or BIO 102 (4-3), and general education requirements (6).

Sophomore Year

First semester: 16 credits

CHM 101, 102 or 103, 105 (4), PHY 213, 285, or 111, 185 (4), GEL 320 (4), and general education requirement or elective (4).

Sophomore Year

Second semester: 16 credits

CHM 112, 114 (4), PHY 214, 286 or 112, 186 (4), GEL 321 (4), and GEL 370 (4).

Junior and Senior Years

In addition to the remainder of the general education requirements and free electives, CSC 201 and the following 4-credit courses are required: GEL 410, 440, 450; approved summer camp (between junior and senior years).

Students must also take 12 credits of science electives (including additional geology courses) which constitute an integrated group in earth science. These are selected in consultation with the faculty adviser. Undergraduates may take 500-level geology courses but they should note the prerequisites and the alternate-year schedule.

German

The Department of Languages offers the Bachelor of Arts (B.A.) degree with a major in German.

Faculty: Associate Professor Grandin, *section head*. Professor Dornberg.

Students selecting this major complete at least 30 credits in German (27 credits for major in secondary education) not including GER 101, 102, 391, 392, or 393. At least 6 credits must be at the 400 level in literature.

History

The Department of History offers a Bachelor of Arts (B.A.) degree. The Master of Arts (M.A.) program in history is described in the *Graduate School Bulletin*.

Faculty: Professor Cohen, *chairperson*. Professors Briggs, Costigliola, Findlay, Gutchen, Kim, Klein, Strom, Thurston, and Weisbord; Associate Professor Roughton; Assistant Professors Daniel, Honhart, Murphy, and Silvestri; Visiting Assistant Professor Besse; Adjunct Associate Professor Klyberg.

Students selecting this field must complete a minimum of 30 credits in history, including a minimum of 6 and a maximum of 12 credits in courses numbered 100 to 299.

The balance of required credits is in courses numbered 300 or above, including one undergraduate seminar, HIS 395. Under unusual circumstances, with permission of the chairperson of the department, a student may substitute, in place

of the seminar, HIS 391 leading to a substantial research paper.

Undergraduates wishing to take courses on the 500 level must secure the permission of the department.

A total of 120 credits is required for graduation.

Italian

The Department of Languages offers the Bachelor of Arts (B.A.) degree with a major in Italian.

Faculty: Professor Trivelli, *section head*. Associate Professor Viglionese; Assistant Professor Sillanpoa.

Students selecting this field complete at least 30 credits in Italian (27 credits for major in secondary education) not including ITL 101, 102, 391, 392, 393, or 395. ITL 325, 326 are required for the major.

A total of 120 credits is required for graduation.

Journalism

The Department of Journalism offers the Bachelor of Arts (B.A.) degree.

Faculty: Associate Professor Campbell, *acting chairperson*. Assistant Professors Levin, Lichtenstein, Rader, and Snodgrass.

Students selecting this major must complete a minimum of 30 credits in the print or broadcast journalism sequence, including JOR 110 (3), 212 (3), 434 (3), 438 (3). In addition, the print sequence requires JOR 312 (3), 325 (3), and either JOR 324 or 326 (3), while students following the broadcast sequence are required to complete JOR 271 (3) and 372 (3). Students may elect to include both the print as well as the broadcast sequence as part of their journalism studies.

All students must take at least 9 more credits in courses (to meet the minimum of 30 credits) offered by the Journalism Department, not more than 6 of which may be in internships. All journalism students are required to type and to complete a writing skills test. Students are urged to pursue either a minor field of study (outside of the Journalism Department) or a double major.

The Department of Journalism has also developed a minor in public relations, in

conjunction with the Marketing and Speech departments.

A total of 120 credits is required for graduation.

Languages

The Department of Languages offers the Bachelor of Arts (B.A.) degree in classical studies, French, German, Italian, Linguistics, Russian, and Spanish, which are described in alphabetical order, as well as courses in Portuguese.

The Department of Languages offers jointly with the English Department the Bachelor of Arts degree in comparative literature studies (see page 35).

Latin American Studies

The Departments of Sociology and Anthropology, History, and Languages offer a Bachelor of Arts (B.A.) degree in Latin American Studies. Students selecting this field must complete a minimum of 36 credits, as follows:

APG 315, HIS 381, 382 and one additional history course dealing with the major; 6 credits in Spanish or Portuguese from the approved list, LAS 397, PSC 201, ECN 363, and 9 credits of electives from approved list of courses.

Credits leading to the B.A. in Latin American Studies may also be taken at foreign universities or other universities in the U.S. having Latin American Studies programs with the approval of the Latin American Studies Committee.

A list of required and suggested courses acceptable for this program can be found on page 116. Courses not listed are not necessarily excluded from this program, provided that the subject matter deals in some way with Latin America. The Latin American Studies Committee must approve the student's program including any course substitutions.

The Latin American Studies Committee will assist students in the formulation and approval of their programs. The current chairperson is Thomas Morin, associate professor of Hispanic studies in the Department of Languages.

A total of 120 credits is required for graduation.

Linguistics

The Department of Languages offers the Bachelor of Arts (B.A.) degree with a major in linguistics.

Faculty: Professor Rogers, *section head.*

Students selecting this field must complete a minimum of 27 credits, as follows: at least 12 credits from LIN 201, 202, 302, 330, 402, 497, 498; and the remaining credits necessary to complete the minimum requirement from APG 200, 409; ENG 330, 332, 430, 530, 536; FRN 503; GER 409; ITL 408; LIN 414; PHL 440; SPA 409; CMD 373, 375; SPE 410.

They must also attain competence in at least one language other than English equivalent to the terminal level of 206.

A total of 120 credits is required for graduation.

Mathematics

The Department of Mathematics offers a Bachelor of Arts (B.A.) degree and a Bachelor of Science (B.S.) degree. The Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees in mathematics are described in the *Graduate School Bulletin*.

Faculty: Professor Suryanarayan, *chairperson.* Professors Beauregard, Datta, Driver, Fraleigh, Ladas, Lewis, P.T. Liu, Montgomery, Roxin, Schwartzman, Sine, Shisha, and Verma; Associate Professors D. Wood, Finizio, Grove, and Pakula; Assistant Professors Barron, Clark, and Kaskosz. Associate Professor Emeritus R. Caldwell.

BACHELOR OF ARTS

Students in this curriculum may tailor a program to suit their individual needs and interests. They should meet with their adviser no later than the end of the first semester of the sophomore year to plan a complete program. This program, and any subsequent changes in it, must be approved by the adviser and the department chairperson. It must contain at least 30 credits in mathematics, and include MTH 141 (3), 142 (3), 215 (3), and 243 (3) as well as two courses at the 400 level.

MTH 107, 108, and 109 are not open to students majoring in mathematics.

A total of 120 credits is required in the B.A. program.

BACHELOR OF SCIENCE

Students in this curriculum may elect either the general program or the applied mathematics option.

General Program. This program stresses basic theories and techniques, and includes an introduction to the principal areas of mathematics. It is recommended for students considering graduate study in mathematics.

Students in this program must complete MTH 141, 142, 215, and 243. These courses should normally be taken in the freshman and sophomore years. Students must complete an additional 27 credits in mathematics, including MTH 316, 425, 435, 436, and 462. MTH 107, 108, and 109 may not be included. The student must take PHY 213, 285 (which may be counted toward the student's general education requirements) and PHY 214, 286. CSC 201 and 202 are recommended.

Applied Mathematics Option. This program is intended for the student who anticipates a career as an applied mathematician or mathematical consultant with an organization such as an industrial or engineering firm, or a research laboratory. The student learns the mathematical ideas and techniques most often encountered in such work. Although a theoretical foundation is developed, the applications are emphasized.

The student must take MTH 141, 142, 215, and 243, preferably by the end of the sophomore year. In addition, the student must complete MTH 437-438, CSC 201-202, 9 credits selected from Group I (Mathematics), and 9 credits selected from Group II (Applications).

Group I: MTH 143, 217, 244, 316, 363, 418, 435, 441, 444, 451, 452, 462, 471, 472, and any MTH course having one of these as a prerequisite.

Group II: CSC 240, 305, 311, 411, 413; ELE 210; EST 409, 412; IME 432, 433; MCE 162, 263; MGS 365, 366, 375, 445; PHY 213-285, 214-286, 322, 331, 341; ZOO 460. Other courses may be used for this group with prior permission of the department.

MTH 435-436 may be substituted for MTH 437-438 if the former is not used in Group I.

Both programs require 130 credits for graduation.

Medical Technology

The medical technology curriculum is administered by the Microbiology Department. This curriculum, leading to the Bachelor of Science (B.S.) degree, prepares men and women for careers in hospitals or medical laboratories. During the first three years, the emphasis is on general education and basic courses in biology, chemistry, mathematics, and physics necessary as background in the applied sciences. The courses of the senior year are taught off campus by the staffs of affiliated hospital schools of medical technology. The senior year is a 12-month program of study and starts soon after the completion of the third year of the curriculum, in June or early July. It is taken at one of the following hospitals which are about 30 miles from the main campus of the University: Miriam Hospital, Rhode Island Hospital, St. Joseph Hospital, which are in Providence; the Memorial Hospital of Pawtucket; or the Rhode Island Medical Center in Cranston. The clinical program includes didactic and laboratory instruction in the various areas of medical technology and prepares the student for the national certification examinations.

Applicants to this curriculum should have completed 62-65 credits by June of the sophomore year and should have taken all courses listed below for the first two years. Students are selected by the University Committee on Medical Technology and by program officials of the hospital schools. Since the number of students admitted to this professional curriculum is limited, interested students should consult early in their college career with the director so that they will be familiar with the requirements and application procedures. Flexibility in the curriculum permits the student who is not accepted to fulfill requirements for the Bachelor of Science degree in another concentration such as microbiology, zoology, or certain related health sciences.

Coordinator: Gregory Paquette.

A total of 130 credits is required for graduation.

*Freshman Year**First semester: 17 credits*

CHM 101, 102 or CHM 103, 105 (4),
BOT 111 or ZOO 111 (4), MTH 109, 111
or 141 (3), and general education
requirements¹⁰ (6).

*Freshman Year**Second semester: 18 credits*

CHM 112, 114 (4), ZOO 111 or BOT 111
(4), EST 407 (3), MTC 102 (1), and gen-
eral education requirements (6).

*Sophomore Year**First semester: 17 credits*

MIC 211 (4), CHM 227 (3), PHY 111, 185
(4), and general education requirements
(6).

*Sophomore Year**Second semester: 15 credits*

CHM 228, 226 (5), PHY 112, 186 (4),
ZOO 242 (3), and general education
requirements (3).

*Junior Year**First semester: 16 credits*

CHM 212 (4), MTC 303 (3), EDC 102 or
312 (3), general education requirement
(3), and elective (3).

*Junior Year**Second semester: 15 credits*

MIC 432 (3), BCP 311 (3), MGT 300 or
301 (3), general education requirement
(3), and elective (3).

*Senior Year**First semester: 16 credits*

MTC 401, 403, 405, and 407.

*Senior Year**Second semester: 16 credits*

MTC 402, 404, 406.

Military Science (ROTC)

The Department of Military Science of-
fers the Army Reserve Officers Training
Corps (ROTC) program described on
page 14.

Faculty: Professor Davis, *chairperson*.
Assistant Professors Costello, Hague,
Lawson, and Litzler.

Music

The Department of Music offers a Bach-
elor of Arts (B.A.) degree and a Bachelor
of Music (B.Mus.) degree. The Master of
Music (M.M.) degree is described in the
Graduate School Bulletin.

Faculty: Professor Heard, *chairperson*. Pro-
fessors J.S. Ceo, Dempsey, Fuchs, Gibbs,
Kent, Motycka, Pollart, and Rankin;
Associate Professor Langdon; Assistant
Professor Wurst; Special Artist Instructors
Abbott, Buttery, Ceo, Chapple, Cobb,
Dean, Fraioli, Gates, Heiken, Immonen,
Marinaccio, Stabile, and Swanson.

BACHELOR OF ARTS

Students selecting music as a major will
complete 32 credits as follows: MUS 113,
114 (8), 215, 216 (6), 221, 222 (6), 251
(6), 317 (3), and upper division music
history and literature (3).

The equivalent of MUS 101 is required
as a prerequisite to MUS 221, 222. This
may be met either by a placement exam-
ination or by taking the course as an elec-
tive. Transfer credits in music theory and
performance must be validated by place-
ment examination.

To conform with the requirements of
the National Association of Schools of
Music of which the department is a mem-
ber, it is strongly recommended that at
least 6 and up to 15 elective credits be
taken in upper-level music courses. An
audition is required for the study of per-
formance.

A total of 120 credits is required for
graduation.

BACHELOR OF MUSIC

Students can be admitted to the Bache-
lor of Music degree program only by
audition and should contact the music
department for specific requirements.

All students in this degree program
must take the following music courses:
MUS 113, 114 (8), 172 (1), 215, 216 (6),
221, 222 (6), 250 (0), and 317 (3) for a
total of 24 credits. Students may meet
the requirement of MUS 172 by passing
the piano proficiency examination before
the accumulation of 60 credits. Students
who have not passed the piano profici-
ency examination by the end of MUS 172
will be expected to take MUS 181, 182 as
needed. Seven semesters of MUS 250 are
required of all Bachelor of Music students.

The equivalent of MUS 101 is required
as a prerequisite to MUS 221, 222. This
may be met either by a placement exami-
nation or by taking the course as an elec-
tive. Transfer credits in music theory and
performance must be validated by place-
ment examination.

All bachelor of music students will take
the piano proficiency examination at the
conclusion of one year of study or by the
end of the second semester of the sopho-
more year. Failure to pass the proficiency
examination or any portion of it requires
reexamination in succeeding semesters.
No one will graduate with a Bachelor of
Music degree until this requirement is
fulfilled.

In addition, each student selects one of
the following majors.

A total of 125 credits is required for
graduation (126 for music education).

Classical Guitar. Students selecting
classical guitar must complete MUS 261
(12), 312 (2), 293 or 295 (4), 299H (4),
420 (3), 441-tablature (3), 461 (16), 465
(0), and upper division music history/
literature (3).

Voice. Students selecting voice must
complete MUS 261 (12), 242 (8), 311 (2),
293 or 295 (8), 461 (16), 465 (0), and up-
per division music history (3).

Students majoring in voice must also
take 15 credit hours of foreign language
in any three or more languages at any
level. The requirement may be modified
or satisfied by advanced placement.

Piano or Organ. Students selecting
piano or organ must complete MUS 261
(12), 293 or 295 (2), 299A or 390 (6), 420
(3), 461 (16), 465 (0), and upper division
music history/literature (3 or 4).

Orchestral Instrument. Students se-
lecting orchestral instrument must com-
plete MUS 261 (12), 312 (2), 321 (3), 290,
291, or 294 (8), 293 or 295 (2), 299 (2),
420 (3), 461 (16), 465 (0), and upper divi-
sion music history/literature (3).

Music History and Literature. Students
selecting music history and literature must
complete MUS 251 (8), 290, 291, 293,
294, 295, or 390 (6), 293 or 295 (2), 407
(3), 408 (3), 420 (3), 430 (3), 431 (3), 432
(3), 433 (3), 434 (3), 441 (3-6) and 451 (8).

¹⁰Language 101 and 102 are required if student enters
without this equivalent.

Students concentrating in music history and literature must have 15 credit hours of foreign languages with intermediate level proficiency in at least one language. The requirement may be modified or satisfied by advanced placement.

Music Theory and Composition. Students selecting music theory and composition must complete MUS 251 (8), 241 or 173, 175, 177, 179 and 4 elective credits for piano majors (8), 321 (3), 291, 290, 293, 294, 295 or 390 (6), 293 or 295 (2), 418 (3), 420 (3), 423 (3), 441 (3), 451 (8), and upper division music history/literature (3 or 4).

Students majoring in composition must take MUS 117, 419 and 422.

Music Education. Students majoring in music education must complete the following:

For all students: MUS 171, *pianists exempt* (1), 251 (8), 311, 312 (4), 321 (3), 339 (3), 340 (3), 451 and/or 452 (8), 455 (0), EDC 102 (3)¹¹, 312 (3), and 484 (6).

In addition, students must select one of the following options:

For general preparation: MUS 173, 174 *vocalists exempt* (2), 169, 170, 175, 176, 177, 178, 179, 180 (8)¹², 290, 291 or 294 (2), 293 or 295 (2), and 4 additional credits selected from 290, 291, 293, 294, 295, or 390 (4).

For vocal specialization: MUS 170 *guitarists exempt* (1), 173, 174 *vocalists exempt* (2), 181, 182 *pianists exempt* (2), 242 *pianists exempt* (2), and 293 or 295 (8). Up to 4 credits of MUS 390 may be substituted for 293 or 295.

For instrumental specialization: MUS 169, 175, 176, 177, 178, 179, 180 (7)¹², 290, 339 (3), 291, 294 (wind and percussion majors must include 2 credits of 291 and 2 credits of 294) (8), and 293 or 295 (2). Up to 4 credits of MUS 390 may be substituted for 290, 291, or 294.

The piano proficiency examination, must be completed a calendar year before student teaching. EDC 101, 312 and all courses listed above, with the exception of MUS 321 and senior-level courses in performance, instrumental classes and major ensembles, must also be completed before entering supervised student teaching. The practice teaching schedule must be preceded by a period of observation.

Philosophy

The Department of Philosophy offers a Bachelor of Arts (B.A.) degree. The Master of Arts (M.A.) program in philosophy is described in the *Graduate School Bulletin*.

Faculty: Professor Wenisch, *chairperson*. Professors Hanke, Y.C. Kim, Peterson, Schwarz, Young, and Zeyl; Associate Professors Johnson, and Kowalski.

Students selecting this field must complete no less than 30 credit hours in philosophy and/or from the following RLS courses: RLS 111, 125, 126, 131, 227, 372. Students must take at least one course from each of the following: logic (101, 451), ethics (312, 314, 414), and metaphysics-epistemology (341, 342) plus at least two history of philosophy courses (321 to 324).

The remaining 15 credit hours may be chosen freely from the departmental offerings. However, students planning graduate work in philosophy are advised to take PHL 341, 342 and 451.

A total of 120 credits is required for graduation.

Physics

The Department of Physics offers a Bachelor of Arts (B.A.) degree and a Bachelor of Science (B.S.) degree. The Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees in physics are described in the *Graduate School Bulletin*.

Faculty: Professor Malik, *chairperson*. Professors Bonner, Cuomo, Desjardins, Hartt, Kaufman, Kirwan, Letcher, Northby, Nunes, Pickart, and Willis; Associate Professors Kahn, Nightingale, and Penhallow; Assistant Professor Mueller; Emeriti Professors Dietz and Stone.

BACHELOR OF ARTS

Students selecting this field must complete a minimum of 36 credits in physics, mathematics, and computer science, including: PHY 111, 112, 185, 186 or 213, 214, 285, 286 (8), PHY 322 (3), 331 (3), 381, 382 (6), 401 or 402 (1), 451 (3), 491, 492 (3), MTH 244 (3), CSC 201, 202 (6).

It is strongly recommended that students take MTH 141 and 142 in the freshman year. If the student is considering graduate study, it is recommended that

courses in French, German or Russian be elected.

A total of 120 credits is required in the B.A. program.

BACHELOR OF SCIENCE

This curriculum provides a general background in both theoretical and experimental physics. It forms an adequate foundation for further study at the graduate level toward an advanced degree, and also prepares the student for a career as a professional physicist in industry or government.

Initiative, independent solution of laboratory problems, and research are encouraged in the advanced laboratory courses.

In addition to the major, students are encouraged to use the large block of elective credits to develop a program of study as a minor (described under Curriculum Requirements on page 29) in applied or interdisciplinary fields, such as acoustics, geophysics, optics, energy, astronomy/astrophysics, atmospheric science, computational physics, mathematical physics, physics education, chemical physics, ocean physics, and engineering physics. As with all minors, it will be recorded on the student's grade transcript.

The following courses will usually be required for the B.S., but exceptions and/or substitutions are possible, and may be arranged upon consultation with the department. For example, a well-prepared student may enroll for physics in the first semester of the freshman year; or courses in a related discipline may be taken instead of physics courses.

A total of 129 credits is required for graduation.

Freshman Year

First semester: 15 credits

MTH 141 (3) and general education requirements (12).

Freshman Year

Second semester: 16 credits

MTH 142 (3), PHY 213, 285 (4), CSC 201 (3), general education requirements (6).

¹¹EDC 102 may also be counted toward the social sciences requirement in the Basic Liberal Studies Program.

¹²One course in the student's major instrument area is exempt.

Sophomore Year

First semester: 16 credits

MTH 243 (3), PHY 214, 286 (4), CSC 202 (3), general education requirements (6).

Sophomore Year

Second semester: 15 credits

MTH 244 (3), PHY 334 (3) and 341 (3), and general education requirements (6).

Junior Year

First semester: 18 credits

PHY 322 (3) and 381 (3), general education requirement (6), and free electives (6).

Junior Year

Second semester: 18 credits

Mathematics elective at the 300 or 400 level (3), PHY 331 (3), 382 (3) and 420 (3), and free electives (6).

Senior Year

First semester: 15 credits

PHY 483 (3), 451 (3) and 455 (3), MTH 461 (3), free electives (3).

Senior Year

Second semester: 16 credits

PHY 484 (3), 402 (1) and 452 (3), and free electives (9).

Political Science

The Department of Political Science offers the Bachelor of Arts (B.A.) degree. The Master of Arts (M.A.) in political science and Master of Public Administration (M.P.A.) programs are described in the *Graduate School Bulletin*.

Faculty: Professor Hennessey, *chairperson*. Professors Killilea, Leduc, Milburn, Stein, Warren, S.B. Wood, and Zucker; Associate Professors Rothstein and Tyler; Assistant Professor K. Murphy.

Students selecting this field must complete a minimum of 30 credits in political science, including PSC 113 (3) and 116 (3).

The remaining 24 credits will reflect the emphasis desired by the student, though at least one course in four of the following six fields must be selected: American politics and public administration, public law, comparative government, international relations, political theory, and political behavior.

A total of 120 credits is required for graduation.

Portuguese

The Department of Languages offers a number of undergraduate courses in Portuguese.

Faculty: Associate Professor McNab, *section head*; Lecturer Campos.

Psychology

The Department of Psychology offers the Bachelor of Arts (B.A.) degree. The Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degree programs in psychology are described in the *Graduate School Bulletin*.

Faculty: Professor N. Smith, *chairperson*. Professors Berman, Biller, Grebstein, Gross, A. Lott, B. Lott, Prochaska, Silverstein, Velicer, Vosburgh, and Willoughby; Associate Professors Cohen, Collyer, Kulberg, Quina, Rapport, Stevenson, and Valentino; Assistant Professors Brady, Florin, and Harlow; Emeritus Professor Merenda.

Students in this field may follow either a general program or a preparatory program for an advanced degree.

The general program requires a minimum of 30 credits to be distributed as follows: PSY 113 (3); at least one from the group PSY 232 (3), 235 (3), 254 (3); both PSY 300 (3) and 301 (3), plus additional psychology electives to total 30 credits. Students interested in careers at the B.A. level should consult the *Handbook for Psychology Majors* and their academic advisers to select additional courses.

The preparatory program adds to the requirements listed above: PSY 232 (3), 235 (3) and 254 (3); at least four courses from the group: PSY 310 (3), 335 (3), 381 (3), 385 (3), 391 (3) and 434 (3). Additional courses should be selected only after consultation with an adviser.

A total of 120 credits is required for graduation.

Russian

The Department of Languages offers the Bachelor of Arts (B.A.) degree with a major in Russian.

Faculty: Associate Professor Aronian, *section head*. Professor Rogers; Assistant Professor Driver.

Students selecting this field complete at least 30 credits in Russian (27 credits for major in secondary education) not including RUS 101, 102.

A total of 120 credits is required for graduation.

Sociology

The Department of Sociology and Anthropology offers the degree of Bachelor of Arts (B.A.) in sociology. The Master of Arts (M.A.) program in sociology is described in the *Graduate School Bulletin*.

Faculty: Professor Carroll, *chairperson*. Professors England, Gardner, Gelles, Gersuny, Rosengren, and Spaulding; Associate Professors Peters and Reilly; Assistant Professors Albert, Mederer, Shea, and Travisano.

Students selecting this major must complete a minimum of 30 credits in sociology, including: SOC 201 (3), 301 (3), 302 (3), and 401 (3).

SOC 301 and 302 should be taken in the junior year; SOC 401 is to be taken during the senior year whenever possible. In addition to the above requirements, majors are required to complete one 400-level seminar and at least two of the remaining five courses must be at the level of 300 or above. SOC 100 and SOC 102 cannot be taken for major credit.

Although the department does not offer a major in social welfare, students planning careers in social welfare, may take social welfare courses as electives. These courses do not count towards the major in sociology. Students interested in anthropology are referred to the anthropology major listed previously in the catalog.

A total of 120 credits is required for graduation.

Spanish

The Department of Languages offers the Bachelor of Arts (B.A.) degree with a major in Spanish. The Master of Arts (M.A.) program in Spanish is described in the *Graduate School Bulletin*.

Faculty: Associate Professor Navascués, *section head*. Professor Hutton; Associate Professors Manteiga, Morin, and Trubiano.

Students selecting Spanish as a major will complete a minimum of 30 credits in

Spanish (27 credits for major in secondary education). One 300-level course, SPA 481, 487 and one other 400-level course are required. SPA 101, 102, 121, 391, 392, and 393 cannot be counted toward the major. LIN 201 and 202 and, with permission of the adviser, the section head, the department chairperson, and the dean of the college, courses in allied fields such as history, art, and anthropology may also be selected. These requirements are the same for secondary education major.

A summer field workshop (SPA 410) in Spain or Spanish America is occasionally offered for 3 to 6 credits. For information, see the section head.

A total of 120 credits is required for graduation.

Speech Communication

The Department of Speech Communication offers the Bachelor of Arts (B.A.) degree with curriculums in speech communication studies.

Faculty: Professor Devlin, *chairperson*. Professors Anderson, Bailey, Dillavou, Doody, and Katula; Associate Professors Brownell and Schultz; Assistant Professors Rice, Rowland-Morin, and Wood; Instructor Wynder.

Speech Communication Studies provide maximum flexibility in planning for a variety of academic and occupational goals. The curriculum is personalized for each student. Although the student will play an important role in curriculum planning, his or her program is closely supervised by the adviser. Specific curricular, extracurricular, and internship programs are planned as integral parts of each student's program. Departmentally approved courses provide the student diversity or a more focused approach, dependent upon the student's needs and goals. Courses outside the department that relate to the student's needs and goals also are encouraged.

Courses in speech communication also can count toward a communication major in the College of Human Science and Services. Other courses can count toward a minor in public relations when taken in conjunction with specific journalism and marketing courses.

Thirty credits are the minimum required for students majoring in speech communication. It is recommended that majors

take SPE 103 and at least 3 courses on the 200 level, 3 courses on the 300 level, and 2 courses at the 400 level.

Speech Communication Studies. This major requires SPE 101, 304, and at least 12 credits of courses at the 300 level. The undergraduate major in the department may pursue studies in any of the following options, dependent upon his or her interests and goals. Students are required to select 15 of their major credits within one of the following tracks:

Individualized Program. Students in consultation with adviser will plan a program to meet their needs.

Business and Professional Communication. Five of the following: SPE 103, 210, 220, 302, 315, 319, 320, 400, 430.

Communication Theory. Five of the following courses: SPE 103, 200, 220, 300, 301, 315, 320, 337, 400, 410, 415.

Oral Interpretation. Five of the following courses: SPE 103, 231, 331, 332, 333, 410, 431, 433.

Rhetoric and Public Address. Five of the following courses: SPE 200, 205, 210, 215, 302, 317, 400, 415, 420, 430.

A total of 120 credits is required for graduation.

Theatre

The Department of Theatre offers a Bachelor of Arts (B.A.) degree and a Bachelor of Fine Arts (B.F.A.) degree. Permission to register for work toward the B.F.A. in theatre must be obtained through a departmental interview.

Faculty: Associate Professor Swift, *chairperson*. Professor Emery; Associate Professor Wheelock; Assistant Professors Armstrong and Wittwer; Technical Director Galgoczy; guest artists supplement the regular faculty in all areas of theatre.

Productions at the University cover the range of theatre forms, ancient to modern, with emphasis on contemporary and experimental work. All members of the University community may participate in productions.

BACHELOR OF ARTS

The B.A. program in theatre is intended for students who wish to receive a general education in theatre within a liberal arts framework. A total of 33 credits is re-

quired as follows: THE 111 (3); 117 (3); 161 (3); 181 (3); 221 (3); 250 (3); 261 (3); 321 (3); 381, 382 (6); 383 or 481 (3). B.A. candidates are required to take ENG 472. B.A. candidates are urged to complete THE 111, 117, 161, and 181 by the end of their freshman year.

B.A. candidates may elect up to 12 more credits in theatre with the approval of their department adviser.

A total of 120 credits is required for graduation.

BACHELOR OF FINE ARTS

The B.F.A. program in theatre is intended for highly motivated students who wish their education to emphasize a major theatrical field of interest. The program offers concentrated study in acting or design, and theatre technology. All B.F.A. students are required to complete a core of 30 credits distributed as follows: THE 111 (3); 117 (3); 161 (3); 181 (3); 221 (3); 250 (3); 261 (3); 381, 382 (6). All B.F.A. candidates must take ENG 472. All B.F.A. candidates are urged to complete THE 111, 117, 161, and 181 by the end of their freshman year.

In addition to these requirements each student selects one of the following areas of specialization.

Acting. Students selecting acting must complete an additional 26 credits including the following: THE 211, 212 (6); 311, 312 (8); 350 (1); 351 or 352 (3); 411, 412 (8). All B.F.A. candidates must take ENG 472. Recommended electives include courses in related fields such as anthropology, art, music, literature, psychology, history, speech, and sociology.

Design and Theatre Technology. Students selecting design and theatre technology must complete an additional 25-28 credits including THE 262 (3); 350 (1); 2 out of 3 of the following course groups: 1) 351, 352, 355 (9); 2) 361, 365, 366 (9); 3) 371, 375 (6); 2 out of the 3 following courses: 455, 465, 475 (6). All B.F.A. candidates must take ENG 472. Recommended electives include ART 207, 251, 252, and courses in related fields such as anthropology, art, literature, music, psychology, history, and sociology.

B.F.A. students selected for an internship program may substitute up to 12 credits from theatre courses in their area of specialization, subject to the approval of the department. Transfer students, late

entries into the theatre major, and others wishing to modify this schedule of B.F.A. requirements may do so in close consultation with their faculty adviser and with the permission of the department.

A total of 124 credits is required for graduation.

Urban Affairs

The Urban Affairs Program Coordinating Committee offers three majors in the College of Arts and Sciences for the Bachelor of Arts (B.A.) degree: Urban Social Processes in the Urban Environment, Policy Formation in the Urban Environment, and Spatial Development in the Urban Environment. The courses that comprise these majors are offered by colleges throughout the University.

The Urban Affairs Program is described on page 11.

Students who select one of these three majors must complete six courses in the common core and four courses chosen from the specialization courses. Each of the majors requires a minimum of 30 credits.

Students who wish to major in one of these should consult the appropriate member of the Urban Affairs Program Coordinating Committee for assistance in the formulation and approval of their majors.

Urban Social Processes. This major examines the functions of urban social systems, explores urban social issues which affect the lives of individuals in an urban environment, and investigates individual and systems-change strategies. Students gain an understanding of the systemic forces which act on individuals in urban societies to produce both positive and negative outcomes. Poverty and social class, the welfare system, race, crime, rapid environmental change, all generate social issues which take on particular significance in an urban setting and have a dramatic impact on the lives of urbanites. In addition to a thorough grounding in theory, students are directed toward research and intervention techniques which they may extend, with graduate training, into the social sciences, criminology, social work, community planning, and other urban-oriented fields. Students seeking jobs at the baccalaureate level may work in social agencies (e.g., welfare, youth development, the criminal justice system), the governmental departments which sponsor and monitor these agencies

or specialized educational facilities (e.g., halfway houses, pre-school enrichment programs, alternative high schools).

Students are expected to satisfy the common core requirements. In addition, they are also required to select 4 courses from the following: APG 319; ECN 401, 403; HCF 220, 434; HIS 339, 343; MGT 301; PSC 420, 483, 486; PSY 335; SOC 314, 316, 330, 336, 240, 320, 318, 438; SPE 315. Students are encouraged to arrange for an urban affairs internship.

Policy Formation. This major identifies the decision-making processes within the metropolis, examines the ways in which public policies are formulated and implemented, and considers ideas about the substance as well as the outcome of the policy-formation processes. An understanding of such decision-making processes requires knowledge of the political, administrative, managerial, planning, and economic aspects of urban life. Students completing the major should be prepared for entry-level administrative jobs in government agencies, business firms and community organizations, or for activist careers in politics. They might undertake graduate work in law, public administration, community planning, business, or related disciplines.

Students are expected to satisfy the common core requirements. They are also expected to select four courses from the following: ECN 342, 401, 402, 403, 464; HIS 323, 324, 339, 340, 341, 343, 363; PSC 460, 466, 483, 495, 498; CPL 410; FIN 331, 341; MGT 321, 422, 423; REN 310; SOC 336, 240, 242, 214; GMA 421, 432, 516. Practicum or internship experience is recommended in this major. It may be obtained through URB 397.

Spatial Development. This major gives the student an interdisciplinary viewpoint of the spatial structure and environmental character of the city. The curriculum is designed to focus special attention on the arrangement, allocation and interrelationships of human and physical resources. Man's relation to the urban ecosystem is examined in terms of the processes, patterns, networks and activities that produce the spatial and temporal organization of urban communities. Analytical and methodological skills may be acquired from courses in cartography, remote sensing, and statistics. The structure of the major should prepare the student to deal effectively with the increasing problems of rapid urban growth and environmental deterioration.

Employment opportunities are available in such activities as urban systems analysis, economic impact studies, cartographic drafting and air photo analysis, industrial location and regional development, and urban environmental problems. Spatial development students should be prepared for work in organizations or agencies that handle questions such as equal allocation of resources, reduction of regional disparities in goods and services, and developing effective alternatives to problems in housing, poverty, pollution, and other human concerns. These organizations can be in either the private or the public sector.

Students are expected to satisfy the common core requirements. They are also required to select four courses from the following: HIS 399; CPL 410, 434, 520; ZOO 262; FIN 341; PSC 460, 466; SOC 214; ECN 402; GMA 421, 516; INS 313; BSL 333; CVE 315; EGR 204. Students are encouraged to acquire an internship experience.

Women's Studies

This new interdepartmental program in the College of Arts and Sciences leads to a Bachelor of Arts (B.A.) degree in Women's Studies. The aim of the program is to provide an option for students who are interested in the interdisciplinary study of the culture and experiences of women.

The Women's Studies program requires 30 credits for a major. Four required courses are: WMS 200; a statistics (e.g., EST 220, PSY 300) or methodology course (e.g., ENG 310, SOC 301, SPE 304) approved by the Advisory Committee; WMS 300; and WMS 400. Six courses to complete the concentration may be selected from the following: ART 285; ENG 260, 385; HCF 330, 420, 430, 432, 437, 505, 559; HIS 118, 145, 347; CNS 320, 401; NUR 150 or 260; FSN 308; PED 475; PSY 480; SOC 212, 242, 316, 413; SPE 310 (Topic: Rhetoric of the Women's Movement); SPE 420 (Topic: Rhetoric of Early Women Suffragists); WMS 350, 450. In addition to this list, there are special courses offered by various departments each year which may also be selected with prior approval by the Advisory Committee.

The Women's Studies Advisory Committee also strongly recommends that majors take an additional 18 credits in a specialized area as a minor.

A total of 120 credits is required for graduation.

College of Business Administration

Robert P. Clagett, *Dean*
Dennis W. McLeavey, *Associate Dean*
Jane M. Stich, *Assistant Dean for Administration*

The 11 majors in the College of Business Administration allow the student to develop competence in a special field of interest and prepare him or her to meet the changing complexities of life and leadership in the business community. Majors are offered in accounting with emphasis possible on governmental, private, and public accounting; finance; general business administration; insurance; management; management information systems; management science; marketing; marketing with a textiles option; personnel management; and production and operations management.

Basic courses required of all undergraduates at the University introduce the student to the humanities, social sciences, physical and biological sciences, letters, foreign language and culture, and the arts. The business curriculums develop the student's professional capabilities through a broad group of business courses with specialization in one area of study. Business programs provide a strong foundation in accounting, computer science, marketing, organizational management, personnel, industrial relations, production and operations management, and statistics. The college emphasizes the behavioral studies and computer technology to meet the needs of the business community and society as a whole. Emphasis is placed upon the total business environment as a part of the national and world economic structure. Theory, analysis, and decision-making are stressed in all areas of learning.



The College of Business Administration is a professional school and has divided its courses into lower and upper divisions. The lower division courses constitute those taught in the freshman and sophomore years; the upper division — those taught in the junior and senior years. Courses taken by transfer students at the lower division level may be applied to satisfying upper division requirements only after successful completion of a validating examination. All 500- and 600-level courses offered by departments in the College of Business Administration are open to matriculated graduate students only.

A student enrolled in this college must complete the curriculum in one of the majors and must obtain a cumulative quality point average of 2.0 or better for all required courses in the major. Students wishing permission to substitute required courses or waive other requirements may petition the college's Scholastic Standing Committee. Petition forms are available in the dean's office.

Due to limited staff and facilities, transfers from University College to the undergraduate degree programs in business administration must be limited to only a few more than 300 a year. Those admitted stand in the highest 300 when cumulative quality point averages are computed at the end of the third semester. Although cumulative averages are not the sole criterion for admission, students with overall quality point averages of less than 2.4 are advised that there is little chance for admission to these programs. Students

who have not satisfied entrance requirements may petition the Scholastic Standing Committee of the college for a waiver of those requirements during their fourth or succeeding semesters. Students in the University College business programs who have not met entrance requirements to the college are permitted to enroll only in 100- and 200-level business courses and in non-business courses.

To ensure that students in business majors have access to required courses, upper level courses will be open only to juniors, seniors, and graduate students. A strict registration priority will be followed. Highest priority will be given to seniors in the College of Business Administration and in the major, followed by graduate students, juniors in the college and the major, seniors in the college but not in the major, juniors in the college but not in the major, seniors in other colleges, and juniors in other colleges. Students following an approved minor will be assigned as though they were in the college but not in the major.

Curriculum Requirements

The following two years are common to all majors except marketing textiles and personnel management.

The Freshman Year Program is 15 credits in each semester. The sequence MGS 101-102 is begun in the first semester and finished in the second. A speech elective from Group C is taken in either of the

two semesters with the balance of credits in general education.

The Sophomore Year Program is 15 credits in each semester. The ACC 201-202, ECN 125-126, and MGS 201-202 sequences are begun in the first semester and completed in the second. MGS 207 and MGT 227 are taken in alternate semesters. The balance of credits is made up of General Education and free electives.

General Education Requirements. Students are required to select and pass 39 credits of coursework from the General Education requirements as listed on page 8. Specific requirements of the College of Business Administration in each group are listed below:

Group A. A minimum of 3 credits in literature.

Groups F, L, and N. Any course for which prerequisites have been met.

Group M. MGS 101 in the freshman year.

Group S. ECN 125, 126 in the sophomore year.

Group C. Speech elective from Group C in the freshman year; MGT 227 (Group Cw) in the sophomore year.

Electives. Professional electives are upper-level courses offered by departments in the College of Business Administration and the Economics Department.

Liberal electives are courses offered by departments outside the College of Business Administration.

Free electives may be either professional or liberal electives.

Minor — Optional. After choosing a major field, students may elect to declare a minor which will appear on their transcripts as a category separate from their major. Credit may be drawn from any combination of major, distribution, electives, and course-level categories. A minor may be defined as (1) the completion of 18 or more credits offered within a department and approved by the department chairperson or (2) the completion of 18 or more credits of related studies offered by more than one department and approved by a member of the University faculty, competent in the minor, and the Scholastic Standing Committee of the College of Business Administration. Students must declare their

minor no later than the end of the add period of the semester they expect to graduate.

International Business Studies. In cooperation with the Department of Languages, the College of Business Administration offers an opportunity for students to include an international emphasis with their undergraduate business major. The business requirements include a major in finance, management, or marketing with professional electives in Multinational Finance, International Dimensions of Business and International Marketing. The student also develops a minor in a language, choosing from French, German, Italian, or Spanish. In addition, studies in international politics, European history, and courses in history and literature of the target country are included. Following the junior or senior year, students have the opportunity to compete for summer, semester, or year-long professional internship positions with firms in Europe.

Accounting

The Department of Accounting offers a curriculum leading to the Bachelor of Science (B.S.) degree. The Master of Science (M.S.) degree, which provides the education recommended by the American Institute of Certified Public Accountants for the practice of public accounting, and the Master of Business Administration (M.B.A.) degree with an opportunity for specialization in accounting are described in the *Graduate School Bulletin*.

Faculty: Associate Professor Schwarzbach, chairperson. Professors Martin, Matoney, and Vangermeersch; Assistant Professors Cairns, Hamilton, Humphreys, Looney, Paquette, and Rebele.

The increased scope of governmental and business activities has greatly extended the field of accounting and has created an unprecedented demand for accountants both in government and in industry. This curriculum has been designed to meet that demand.

In addition to providing a general cultural and business background, the curriculum offers specialized training in the fields of general accounting, cost accounting, and public accounting. It offers specific, basic training to students who wish to become general accountants, in-

dustrial accountants, cost analysts, auditors, credit analysts, controllers, income tax consultants, teachers of specialized business subjects, certified public accountants, government cost inspectors, government auditors.

The broad scope of the courses offered makes it possible for a student who is interested in any of the fields of accounting to obtain fundamental training in the field of his or her choice, whether this training is to be used as an aid to living or as a basis for graduate study.

Junior Year

First semester: 15 credits

ACC 311 and 321, FIN 301, MGT 301, and a free elective.

Junior Year

Second semester: 15 credits

ACC 312, 443, MKT 301, MGS 309, and 364.

Senior Year

First semester: 15 credits

ACC 431 and 461, BSL 333, ECN or FIN elective,¹ and a free elective.

Senior Year

Second semester: 15 credits

ACC 415, BSL 334 or 442, MGT 410, a professional elective, and a free elective.

Note: One free elective must be chosen from GMA 131, PSC 113, MGT 380, or PHL 312. Another must be chosen from PSY 113, SOC 100, 102, or 204.

Finance

The Department of Finance and Insurance offers a curriculum in finance leading to the Bachelor of Science (B.S.) degree. The Master of Business Administration (M.B.A.) degree with an opportunity for specialization in finance is described in the *Graduate School Bulletin*.

Faculty: Associate Professor Lord, chairperson. Associate Professors Dash and Rhee; Assistant Professors Briden, Carlson, Chang, Leistikow, and Severns.

¹This may be any 300- or 400-level ECN or FIN course except FIN 341.

A major in finance prepares for managerial positions in the private, public and not-for-profit sectors of the economy. The curriculum emphasizes both financial decision-making and implementation.

Careers in finance are to be found in (1) commercial banking and other financial institutions; (2) security analysis, portfolio, and related investment management; (3) corporate financial management leading to positions as treasurer, controller, and other financial administrative positions; (4) financial administration tasks in federal and state agencies as well as in the non-profit sector in hospitals, nursing homes, and educational institutions.

Junior Year

First semester: 15 credits

BSL 333, FIN 301 and 331, MGT 301, and a liberal elective.

Junior Year

Second semester: 15 credits

FIN 322, MGS 309, MKT 301, a professional elective, and a liberal elective.

Senior Year

First semester: 15 credits

Finance elective, three professional electives, and a free elective.

Senior Year

Second semester: 15 credits

Two finance electives, MGT 410, a professional elective, and a free elective.

Note: Finance electives must be drawn from FIN 401, 420, 425, 431, 433, 442, 452, and 460.

General Business Administration

The College of Business Administration offers a curriculum in general business administration leading to the Bachelor of Science (B.S.) degree. The general business administration curriculum offers the student an opportunity to study all phases of business operation. It is particularly suitable for (1) those students who are planning to operate their own businesses and are seeking a broad business background, (2) those who are preparing for positions in large organizations with training programs in which specialization is taught after employment, and (3) those who desire a general business background

at the undergraduate level prior to taking more specialized graduate work.

Students who major in the general administration curriculum shall be limited to a maximum of 9 credit hours of professional electives in a specific major. A general business administration student should take a broad spectrum of courses and not concentrate in one special field of study.

Junior Year

First semester: 15 credits

FIN 301, MGS 309, MKT 301, MGT 301, and a free elective.

Junior Year

Second semester: 15 credits

FIN elective, an MKT elective, and MGT elective at the 300 level, INS 301, and a free elective.

Senior Year

First semester: 15 credits

BSL 333, two professional electives, and two free electives.

Senior Year

Second semester: 15 credits

MGT 410, three professional electives, and a free elective.

Insurance

The Department of Finance and Insurance offers a curriculum in insurance leading to the Bachelor of Science (B.S.) degree. The Master of Business Administration (M.B.A.) degree with an opportunity for specialization in insurance is described in the *Graduate School Bulletin*.

Insurance is a basic industry which functions throughout the economy to indemnify loss and reduce risk. In performing these functions, insurance companies, through their home and branch offices, their agencies and bureaus, currently employ about a million persons in a great variety of jobs (selling, administrative, technical, research, etc.).

For success in this industry, the professional concept with its emphasis on expert knowledge has become increasingly important, and students in this curriculum are prepared for and encouraged to work toward the professional designations conferred by the American College of Life Underwriters (C.L.U.) and the American Institute of Property and Liability Underwriters (C.P.C.U.).

The curriculum offers comprehensive preparation for diversified career opportunities in insurance, including satisfaction of state requirements for agents' and brokers' licenses in fire and marine, casualty and surety, and life and accident-sickness fields. It is approved by state insurance departments in Rhode Island and New York.

Junior Year

First semester: 15 credits

BSL 333, FIN 301, INS 301, MGT 301, and a professional elective.

Junior Year

Second semester: 15 credits

INS 313, 325, FIN 331, MKT 301, and a professional elective.

Senior Year

First semester: 15 credits

MGS 309, two INS electives, a liberal elective, and a free elective.

Senior Year

Second semester: 15 credits

INS elective, MGT 410, a professional elective, a liberal elective, and a free elective.

Note: The three INS electives must be chosen from INS 414, 433, 471, or either FIN 341 or 442.

Management

The Department of Management offers a curriculum leading toward the Bachelor of Science (B.S.) degree. The Master of Business Administration (M.B.A.) degree with an opportunity for specialization in management is described in the *Graduate School Bulletin*.

Faculty: Professor deLodzia, *chairperson*. Professors Coates, Comerford, Overton, Schmidt, and Sink; Associate Professors Laviano, and Scholl; Assistant Professors Beauvais, Dunn, Hetzner, Hickox, and Hunt.

This curriculum is intended to provide the student with a background in the conceptual, analytical, and applied aspects of the management of organizations. The areas of study focus upon decision-making from the perspective of the policy sciences. Courses tend to cluster in the areas of behavioral science, including organizational theory, business law,

general business administration and policy, and industrial and labor relations. Courses are carefully integrated to include an overall introduction to business administration, with a number of complementary areas of study in organizational theory and behavior, the management of human resources, industrial and labor relations, personnel administration, general business administration, and business law.

Careers in business, government, hospitals, and other organizations are open to students who have successfully completed the curriculum. These studies also provide a good background for graduate programs in management.

Junior Year

First semester: 15 credits

FIN 301, MKT 301, MGT 301, one professional elective, and one free elective.

Junior Year

Second semester: 15 credits

MGS 309, MGT 304, 305, one free elective, and one liberal elective.

Senior Year

First semester: 15 credits

BSL 333, MGT 303, 380, and 407, and a free elective.

Senior Year

Second semester: 15 credits

MGT 410 and 423, one professional elective, and two free electives.

Management Information Systems

The Department of Management Science offers a curriculum in management information systems leading toward the Bachelor of Science (B.S.) degree. The field of information systems is concerned with the collection, storing, processing, structuring, retrieval, and reporting of information to assist managers in the operations, management, and decision-making functions of an organization.

The program provides a thorough grounding in computer technology, systems analysis, combined with business and management training.

Junior Year

First semester: 15 credits

BSL 333, FIN 301, MGS 309, 307, 483.

Junior Year

Second semester: 15 credits

MKT 301, MGT 301, MGS 364, 484, professional elective.

Senior Year

First semester: 14 credits

MGS 485, MGS elective, 2 professional electives, and liberal elective.

Senior Year

Second semester: 15 credits

MGS 488, MGT 410, MGS elective, professional elective, and a free elective.

Management Science

The Department of Management Science offers a curriculum in management science leading to the Bachelor of Science (B.S.) degree. The Master of Business Administration (M.B.A.) degree with an opportunity for specialization in management science is described in the *Graduate School Bulletin*.

Faculty: Professor Jarrett, *chairperson*. Professors Armstrong, Budnick, Kim, Koza, McLeavey, Mojena, Narasimhan, Rogers, and Shen; Associate Professors Ageloff, Humphrey, and Mangiameli; Assistant Professors Ebrahimpour and Westin.

Management science (MGS) is concerned with the development and application of quantitative techniques to the solution of problems faced by managers of public and private organizations. More specifically, theory and methodology (tools) in mathematics, probability, statistics, and computing are adapted and applied in the identification, formulation, solution, implementation, control, and evaluation of administrative or decision-making problems.

The MGS major relates to the interface between quantitative techniques and their application in the real world. Upon graduating, majors will be qualified for (1) staff positions responsible for implementing and communicating quantitative approaches to decision-making, (2) management trainee programs which lead to assignments in any of the functional areas of an organization, or (3) graduate study leading to a master's degree or a doctorate.

Junior Year

First semester: 15 credits

BSL 333, FIN 301, MGS 301, 370 and MKT 301.

Junior Year

Second semester: 15 credits

MGS 309, 365, MGT 301, a professional elective, and a free elective.

Senior Year

First semester: 15 credits

MGS 366, 475, two professional electives, and a free elective.

Senior Year

Second semester: 15 credits

MGT 410, an MGS elective, a professional elective, and two free electives.

Marketing

The Department of Marketing offers a curriculum leading to the Bachelor of Science (B.S.) degree. Career tracks are formed from elective courses for specialization in advertising, retailing, sales management, product management, international marketing, marketing research, and public and non-profit sector marketing. The marketing-textiles option, leading to the Bachelor of Science degree, may also be pursued in the Department of Marketing. This program is offered in conjunction with the Department of Textiles, Fashion Merchandising and Design. The option is designed to prepare students for managerial positions in the textile industry. The Master of Business Administration (M.B.A.) degree with an opportunity for specialization in marketing is described in the *Graduate School Bulletin*.

Faculty: Professor Nason, *chairperson*. Professors Alton, Della Bitta, N. Dholakia, R. Dholakia, Hill, Johnson, and Weeks; Associate Professors Lysonski and Seymour; Assistant Professor Lessne.

A major focus of marketing is the determination of product and service needs of consumers and industries. Marketing research, information systems, and analysis are used in the development and management of products and services as well as the design and execution of communications, pricing, and distribution channels.

*Junior Year**First semester: 15 credits*

MGS 309, MGT 301, MKT 301, one free elective, and one liberal elective.

*Junior Year**Second semester: 15 credits*

FIN 301, MKT 415, one MKT elective, a professional elective, and a free elective.

*Senior Year**First semester: 15 credits*

BSL 333, two MKT electives, a professional elective, and a liberal elective.

*Senior Year**Second semester: 15 credits*

MGT 410, MKT 409, two MKT electives, and a professional elective.

Marketing-Textiles Option*Freshman Year**First semester: 16 credits*

MGS 101, TMD 103, CHM 103 and 105, an art elective from Group A, and an elective from Group F.

*Freshman Year**Second semester: 15 credits*

MGS 102, a speech elective from Group C, one elective each from Groups L, A, and F.

*Sophomore Year**First semester: 15 credits*

ACC 201, ECN 125, MGS 201 and 207, and MGT 227.

*Sophomore Year**Second semester: 16 credits*

ACC 202, ECN 126, MGS 202, CHM 124, and TMD 224.

*Junior Year**First semester: 15 credits*

FIN 301, MGT 301, MKT 301, TMD 303, and 240 or 340 or 440.

*Junior Year**Second semester: 15 credits*

MGS 309, MKT 415, TMD 403, a MKT elective, and a free elective.

*Senior Year**First semester: 15 credits*

BSL 333, two MKT electives, a TMD elective, and a free elective.

*Senior Year**Second semester: 15 credits*

MGT 410, MKT 409, two MKT electives, and TMD 433.

Personnel Management

The Department of Management offers a curriculum in personnel management leading to the Bachelor of Science (B.S.) degree. The field of personnel management is concerned with the management and effective utilization of human resources in traditional functions such as recruitment, selection, development, motivation, and compensation, and the industrial relations areas of collective bargaining, labor dispute settlement, labor history, and labor organizations. Additionally, the legal, social, and organizational frameworks and requirements are focused upon with required courses in labor relations law, social security, and protective labor legislation (OSHA, unemployment and workers' compensation, EEO, etc.), organizational behavior, labor economics, and recommended courses in business and labor history.

The personnel management curriculum provides a broad, but rigorous and structured preparation for professional opportunities in Personnel Management within large and small industrial or service organizations in the public sector (federal, state, local), not-for-profit organizations, and for professional staff positions within trade unions and other employee organizations. Additionally, qualified students will be encouraged to continue their studies within specialized master's and Ph.D. programs.

*Freshman Year**First semester: 15 credits*

MGS 101, PSY 113 is recommended as a liberal elective, one elective each from Groups A, F, and N.

*Freshman Year**Second semester: 15 credits*

MGS 102, HIS 143 is recommended as a Group L elective, and one elective each from Groups A, F, and N.

*Sophomore Year**First semester: 15 credits*

ACC 201, ECN 125, MGS 201, 207, and a group C elective.

*Sophomore Year**Second semester: 15 credits*

ACC 202, ECN 126, MGS 201, MGT 227, and HIS 348 is recommended as a Group L elective.

*Junior Year**First semester: 15 credits*

FIN 301, MGT 301, 303, 321, and MKT 301.

*Junior Year**Second semester: 15 credits*

MGS 309, MGT 304, 422, 437, and BSL 333.

*Senior Year**First semester: 15 credits*

MGT 410, 423, 435, 426, and INS 433.

*Senior Year**Second semester: 15 credits*

MGT 424, 439, a liberal elective, and two free electives.

Production and Operations Management

The Department of Management Science offers a curriculum in production and operations management leading to the Bachelor of Science (B.S.) degree. The Master of Business Administration (M.B.A.) degree with an opportunity for specialization in production and operations management is described in the *Graduate School Bulletin*.

Issues, concepts, and techniques encountered in efficiently managing the modern production function in industry and business are the main concerns of this curriculum. The modern production function is here defined in a wider sense, to include all kinds of operations which employ men and machines to produce visible goods as well as to render intangible services. A basic understanding of the management task of design and evaluation of the possible alternative operations and processes is emphasized. Practice and implications of computer-based systems and operations in management are also investigated.

The operations management major prepares students to become certified production and inventory controllers. Certification examinations are administered by the national Educational Testing Service (ETS) and prepared by practitioners

in the American Production and Inventory Control Society. Coursework in the major goes well beyond that necessary for the examinations and should put the students at the forefront of the field.

Among the topics covered in the major are: forecasting, capacity planning, inventory planning, material requirements planning, and operations scheduling and control.

Junior Year

First semester: 15 credits

FIN 301, MGS 309, MGS 364 or 301 (students electing MGS 301 must complete the sequence MGS 365-366), MKT 301, and a free elective.

Junior Year

Second semester: 15 credits

MGS 483, MGT 301, two professional electives, and a free elective.

Senior Year

First semester: 15 credits

BSL 333, MGS 311, 310, MGT 304, and a professional elective.

Senior Year

Second semester: 15 credits

MGS 458, 445, MGT 410, a professional elective, and a free elective.

College of Continuing Education

Walter A. Crocker, Jr., *Dean*

The College of Continuing Education offers classes and degree programs in continuing education and degree programs designed for adults whose family or work responsibilities have caused interruption in their formal post-high-school education. Academic programs lead to Bachelor of Science degrees in business administration; industrial engineering; nutrition and dietetics; food science technology; general home economics; home economics education; human development, counseling and family studies; and textiles and clothing. Bachelor of Arts degrees may be obtained in economics, English, history, psychology, and speech communication. The Bachelor of General Studies degree offers majors in business institutions and human studies. Graduate level programs include Master of Business Administration (including an option for experienced executives), Master of Library Science, Master of Marine Affairs, Master of Public Administration, and graduate degrees in Computer Science, Electrical Engineering, and Mechanical Engineering and Applied Mechanics through special arrangement with several high technology firms in the state. For curriculum requirements refer to the appropriate sections in this bulletin.

Certification programs for various professions as well as individual credit and non-credit (CEU)¹ courses are also offered. In addition, institutes and special courses are planned for business, industry, labor, government, and the professions.



Courses are offered on weekday mornings, afternoons, and evenings, and on Saturdays in the fall, spring, and summer. Students enrolling in a degree program may attend at times most convenient for them. The college also operates community centers in Kingston and Middletown.

Summer Session. The College of Continuing Education has administrative responsibility for developing, scheduling and coordinating all summer offerings of the University of Rhode Island. Day and evening courses are offered in two five-week terms at Kingston and Providence. In addition, a number of special programs, including study abroad, are offered at varying dates in the alternate term. Students may attend either or both campuses and enroll in day or evening courses offered in any summer term. Students expecting to apply summer credit to an academic degree program are advised to obtain prior approval from their academic dean before registering. Maximum course load is 7 credits per summer term including simultaneous courses in the alternate term. Exceptions are allowed with permission of the student's academic dean.

¹Continuing Education Unit.

Bachelor of General Studies

The College of Continuing Education's own degree program, the Bachelor of General Studies (B.G.S.) is a time-shortened undergraduate program for adults who have had no formal schooling for at least five years. The B.G.S. program is useful both for students who have never been to college and for those who dropped out of college at some point in the past. For the latter group, B.G.S. offers a creative approach to bringing forward previous educational experience and applying it to this adult degree program. Because there are several alternative ways to meeting admission requirements for the program, the admissions process begins with an interview with a B.G.S. adviser in the Academic Programs Office of the College of Continuing Education.

The B.G.S. program consists of six required sections listed below.

The Pro-Seminar. (4 credits) This required reentry course (BGS 100) introduces adult students to the processes of academic thought and inquiry, builds confidence in their capacity to do college-level work, and helps them identify their scholastic strengths and interests. During the Pro-Seminar students are required to take the College Level Examinations Program (CLEP) General Examinations (for which there is a fee). CLEP credits may be applied toward the General Education requirements.

General Education Requirements. (39 credits) Students in the B.G.S. program must meet the University's General Education requirements as explained on page 8 of this bulletin. B.G.S. students may use BGS 390, 391, and 392 to fulfill General Education requirements or may take other approved General Education courses appropriate to their program. Students should consult frequently with B.G.S. advisers.

Majors. (45 credits) B.G.S. students have a choice of two multi-disciplinary majors: business institutions and human studies. Each consists of 15 three-credit courses.

Both the human studies major and business institutions major allow students to take courses in several disciplines to meet their educational goals in a non-traditional way. Although the business institutions major is carefully prescribed, the student will note that the human studies program encourages the student to work

creatively with an adviser to design an individualized major that meets both student needs and the general goals of the program.

Business Institutions Major

ACC 201	Elementary Accounting I
ACC 202	Elementary Accounting II
MGT 227	Business Communications
BSL 333	Law in a Business Environment
ECN 125	Economic Principles I
ECN 126	Economic Principles II
CSC 201	Introduction to Computing I
FIN 301	Financial Management
MGS 101	Introduction to Quantitative Analysis I or MTH 109 Algebra and Trigonometry
MGS 102	Introduction to Quantitative Analysis II or MTH 141 Introductory Calculus
MGS 201	Managerial Statistics or EST 220 Statistics in Modern Society
MGS 309	Production Management
MGT 301	Fundamentals of Management
MKT 301	Marketing Principles

In addition to the above required courses, students must elect one liberal elective course offered by a department outside their majors. Most courses that fulfill these major requirements are available in Providence in the evening. With careful planning, however, it is possible for students to complete approximately two-thirds of the program's requirements in evening courses at the Kingston campus.

Human Studies Major

This major requires a *social science core* of 24 credits selected from courses in economics, geography, history, political science, psychology, and sociology and anthropology (including social welfare), distributed among the disciplines as follows: four courses (12 credits) in one, two courses (6 credits) in a second, and two courses (6 credits) in a third. No more than two introductory level courses may be used, and of these only APG 203, ECN 123 or 125, GEG 101, PSC 113, PSY 113, SOC 100 or 102 are acceptable. Students must also take a *methodology course*, HSS 320 (3 credits) or, in exceptional cases, this may be substituted with one of the following: APG 402, EST 220, HIS 395, GEG 421, PSY 300, or SOC 301. In addition to this course and the core courses, students must take a total of 15

credits in an *area of emphasis* appropriate to their degree goals. Participating departments and programs are listed below.

Psychology
Political Science
Sociology, Anthropology and Social Welfare
Geography
History
Economics
Speech
Computer Science
Journalism
Languages (Portuguese, Spanish, French)
Community Planning
Marine Affairs
Women's Studies
Afro-American Studies
Urban Affairs
Human Science and Services
Human Development, Counseling and Family Studies
Health²
Nursing²
Food Science and Nutrition²
Education²
Consumer Studies²
Management²
Marketing²
Business Law²
Business Communications²

Up to 9 credits may be taken in the University Year for Action program. The fourth requirement of the major is the *major seminar*, BGS 397 (3 credits), to be taken near the end of the program.

Electives. (27 credits) The electives permit students to complete the B.G.S. degree in a number of creative ways, either through carefully designed work experience internships, or previous but relevant educational experience, or both. Or students may choose to take courses to fulfill this requirement. BGS 390, 391, and 392 may be counted as electives if they are not used to fulfill General Education requirements.

B.G.S. Senior Seminars. Upon completion of at least 40 credits, a student may begin to take the sequence of three required 6-credit senior seminars (BGS 390, 391, 392). The senior seminars may be applied either to the General Education

²In these departments only certain courses are appropriate for the human studies major. Refer to an adviser for details.

requirement or to the elective requirement of the B.G.S. program.

Senior Project. (3 credits) All B.G.S. students must complete the BGS 399 Senior Project or a departmental directed study. Students are required to meet with a B.G.S. adviser one semester before enrolling in this course. Approval of an appropriate faculty adviser and the B.G.S. coordinator are necessary prior to registration for BGS 399.

A total of 118 credits is required for the Bachelor of General Studies Degree.

Fees and Finances

Charges and fees set forth in this listing are subject to change without notice. All charges are payable by the semester and are due at the time of registration. Checks or money orders should be made payable to the University of Rhode Island. For financial assistance, refer to "Financial Aid" in this section.

Tuition and Fees. Registration fee is \$10, payable once each semester. The tuition for in-state students is \$62 per undergraduate credit and \$87 per graduate credit. The out-of-state student tuition is \$173 per undergraduate credit and \$198 per graduate credit.

Refund Policy. If a course is officially dropped before the first class meeting, a full refund of tuition will be authorized. After classes have begun, the following refund schedule applies:

<i>Fall/Spring Semester</i>	<i>Refund</i>
During first week	80%
During second week	60%
During third week	40%
During fourth week	20%
After fourth week	No refund
<i>Summer Session</i>	
Before second class	60%
Before third class	20%
After third class	No refund

The registration fee is refundable only when a course is cancelled or closed by the University. There is no charge for adding a course to replace one dropped or cancelled.

Financial Aid. Only matriculated students enrolled on at least a half-time

basis (6 credits) may be considered for an award. The Student Financial Aid Office determines eligibility for all grants, loans, and employment, which are awarded on an academic year basis. Financial aid will be awarded only after a student has applied for a Pell Grant and has submitted a Pell Student Eligibility Report to the Student Financial Aid Office. For more detailed information, contact a peer counselor.

Student Services

The College of Continuing Education provides a number of services for students in Providence and the community centers. Among these are free academic advising, peer counseling, health education, campus ministry and, at minimal cost, a testing service. Advisers are available to answer questions about registration, admissions, degree programs, and the College Level Examination Program. The peer counseling service provides students the opportunity to meet with other adult students who have been trained to help them with problem solving, including issues of minority groups and of the handicapped. In testing services, a staff of certified psychologists administers a number of psychological tests and evaluations to individuals and groups to help them make personal or career decisions.

The college also has at its Providence location a bookstore, library, nursery school, plus a comfortable student center where students and faculty can meet, talk, and relax.

Registration and Admission

Enrollment in University courses offered by the College of Continuing Education is accomplished by completing a registration form prior to the beginning of each semester. Being enrolled in a course is not the same as being admitted to the University. To apply for admission to an undergraduate degree program a student must follow the application procedure stated below. However, credits earned through successful completion of courses may eventually be applied toward a degree program upon a student's acceptance as a degree candidate.

Beginning students who have been away from school for some time and

have little or no coursework beyond high school are encouraged to register in one of the special entry courses. These are BGS 100, the Pro-Seminar, and WRT 123, College Writing for Returning Students.

Any adult may enroll as a non-matriculated student in the College of Continuing Education. All courses at the University are open to non-matriculated students; however, day courses at the Kingston campus are open only on a space available basis.

All information and forms necessary for registration are included in the semester course list printed two to three weeks before each term begins. The lists, containing up-to-date course offerings and fees, are available during the registration periods, or they may be obtained through written or telephoned request.

Application Procedures. A student wishing to enroll in an undergraduate degree program in the College of Continuing Education does so through the Academic Programs Office. An initial interview is recommended so that program options may be explored as well as the student's capabilities. A student then files an Application for an Undergraduate Degree and provides the Academic Programs Office with official transcripts.

Students admitted to undergraduate degree programs should consult with the appropriate faculty coordinator concerning their major. A worksheet of courses is prepared and maintained as a checklist toward graduation requirements. It is the strict responsibility of the student to file an Intention to Graduate form with the Academic Programs Office three semesters in advance of the contemplated date.

College of Engineering

Hermann Viets, *Dean*
Robert H. Goff, *Associate Dean*

The College of Engineering offers undergraduate majors in chemical, chemical and ocean, civil, computer electronics, electrical, industrial, and mechanical engineering. In addition, ocean options are available in civil and in mechanical engineering. Because the same fundamental concepts underlie all branches of engineering, the freshman year courses are quite similar for all curriculums, and the choice of a specific branch of engineering may be delayed until the beginning of either the second term, or the second year of study. Students electing one of the programs that include ocean engineering follow the curriculums for chemical, civil, or mechanical engineering for two or three years and enroll in many ocean engineering courses in the junior and senior year.

All of the engineering curriculums are based on an intense study of mathematics and the basic sciences, and of the engineering sciences common to all branches of the profession. On this base is built the in-depth study of the important principles and concepts of each separate discipline. These principles are applied to the understanding and solution of problems of current interest and importance in the field. Each curriculum is designed to provide the knowledge and ability necessary for practice as a professional engineer, or for successful graduate study, which may include law, business administration or medicine as well as the normal engineering and science disciplines.

The goal of the college is to stimulate the students to become creative, respon-



sible engineers, aware of the social implications of their work, and flexible enough to adjust to the rapid changes taking place in all branches of engineering. Engineers from all fields are heavily involved in the solution of technological and socio-technological problems. The needs of industry are for balanced teams of both men and women from the different engineering areas.

Entering students who have chosen a specific major should follow the particular program listed below. Those who have decided to major in engineering, but have not selected a specific program, should select courses in general chemistry, General Education electives, MTH 141, 142; EGR 102; MCE 162 and/or PHY 213 and 285.

Students who are undecided about engineering, but who wish to keep it open as an option, should take note that MTH 141 and 142, MCE 162 or PHY 213 and 285, and a course in chemistry, are required for graduation from the College of Engineering, and are prerequisites for many engineering courses. They must be taken before transferring from University College to the College of Engineering.

To transfer from University College to the College of Engineering, students must not only have completed 24 credits with a grade point average of 2.0 or better, they must also have completed all of the required mathematics, science, and engineering courses of the freshman year with a grade point average of 2.0 or better.

To meet graduation requirements stu-

dents enrolled in the College of Engineering must satisfactorily complete all courses of the curriculum in which they are registered and must obtain a grade point average of 2.0 or better in all required science, mathematics, and engineering courses (including professional electives).

General Education Requirements.

Engineering students, in common with all students in the University, must meet the University's General Education requirements listed on page 8 of this catalog. In these courses students are exposed to and challenged by concepts from the humanities and social sciences to insure that the social relevance of their engineering activities will never be forgotten. In selecting courses to satisfy these requirements, students should consult with their advisers to be certain that they have chosen courses which satisfy both the University requirements and the requirements of the Accreditation Board for Engineering and Technology. The requirements in mathematics and natural sciences are satisfied by required courses in the engineering curriculums. Three credits must be taken in the Foreign Language and Culture group, and six credits each in English Communications, Fine Arts and Literature, Social Sciences, and Letters. In two of the latter three groups, both courses must be taken in the same department. The second course may not be at the 100 level, unless it has the first course as a prerequisite or is an obvious continuation of the first.

Freshman Year. All engineering curriculums have similar programs during the freshman year. This provides some degree of flexibility to those students who are uncertain about their choice of curriculum. Except for the Chemical and the Chemical and Ocean Engineering majors, all engineering students take the following 17-credit program in the first semester.

- 3 CHM 101 Gen. Chemistry I
- 1 CHM 102 Lab. for CHM 101
- 1 EGR 102 Basic Graphics¹
- 3 MTH 141 Introd. to Calc. with Anal. Geometry
- 3 ECN 125 Economic Principles
- 3 CSC 201 Introd. to Computing
- 3 General education elective

Students who are still undecided about their choice of major after completing the first semester should review their choice of courses for the second semester with their adviser to be certain that they meet the prerequisites for the sophomore year.

Accreditation. The curriculums in chemical, civil, electrical, industrial and mechanical engineering are currently accredited by the Accreditation Board for Engineering and Technology (ABET).

Biomedical Electronics Engineering

Because of severe staffing problems, the undergraduate program in biomedical electronics engineering is temporarily suspended, effective June 1984. No new students are being accepted into the program. When sufficient facilities and staff are available to meet student demands, the program will be recalled to active status.

The Bachelor of Science (B.S.) degree in biomedical electronics engineering is offered by the Department of Electrical Engineering. Specialization in biomedical engineering is also available within the Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) programs in electrical engineering. See the *Graduate School Bulletin*.

Biomedical engineers design medical instruments such as electrocardiographs, electroencephalographs, blood analyzers and X-ray machines for diagnosis of disease, equipment such as radiotherapy machines, pacemakers and lasers for surgery, and develop artificial organs for

prosthesis. They design computer systems to help physicians monitor critically ill patients, to correlate a multitude of disease symptoms in order to diagnose a disease, and to determine the best course of treatment.

Biomedical engineers are employed in (1) the medical instrument industry, where they design, manufacture, sell and service medical equipment; (2) hospitals, which employ engineers in increasing numbers to select, evaluate and maintain complex medical equipment and to train the hospital staff in their use, and (3) medical and biological research centers, which use the specialized training of the biomedical engineer to apply engineering techniques in research projects.

The biomedical electronics engineering program combines study in the biological sciences with those areas of engineering which are particularly important for the application of modern technology to medicine. With a few minor elective changes the program also satisfies the entrance requirements of most medical schools, but students who plan to go on to medical school should consult the premedical adviser and the coordinator of the biomedical electronics engineering program.

For transfer from the University College to the College of Engineering in the Biomedical Electronics Engineering program students must have completed *all science, mathematics, and engineering courses required during the first two semesters* (see below) with grade average of C or better

The major requires 138 credits.

Freshman Year

First semester: 17 credits

- 3 CHM 101 Gen. Chemistry I
- 1 CHM 102 Lab. for CHM 101
- 1 EGR 102 Basic Graphics
- 3 MTH 141 Introd. to Calculus with Anal. Geometry
- 3 ECN 125 Economic Principles
- 3 CSC 201 Introd. to Computing
- 3 Gen. educ. elective

Freshman Year

Second semester: 18 credits

- 4 CHM 124 Organic Chemistry
- 3 MTH 142 Intermed. Calc. with Anal. Geometry
- 3 PHY 213 Elementary Physics
- 1 PHY 285 Lab. for PHY 213
- 4 ZOO 111 Gen. Zoology
- 3 Gen. educ. elective

Sophomore Year

First semester: 16 credits

- 3 ELE 211 Linear Systems and Circuit Theory I
- 3 ELE 210 Introd. to Elec. & Magnetism
- 1 ELE 214 Lab. for ELE 211
- 3 MTH 243 Calc. & Anal. Geometry
- 3 ZOO 345 Basic Animal Physiology
- 3 Gen. educ. elective

Sophomore Year

Second semester: 18 credits

- 3 ELE 205 Microprocessor Lab.
- 3 ELE 212 Linear Systems and Circuit Theory II
- 3 MCE 263 Dynamics
- 3 MTH 362 Adv. Engineering Math I
- 3 PHY 223 Introd. to Acoustics & Optics
- 3 Gen. educ. elective

Junior Year

First semester: 19 credits

- 4¹ ELE 313 Linear Systems
- 3 ELE 322 Electromagnetic Fields I
- 3 MTH 363 Adv. Engineering Math II
- 3 PHY 341 Introd. to Modern Physics
- 6 Gen. educ. electives

Junior Year

Second semester: 16 credits

- 3 ELE 314 Linear Systems and Signals
- 3 ELE 323 Electromagnetic Fields II
- 4 ELE 342 Electronics I
- 3 PHY 420 Introd. to Thermodynamics & Stat. Mechanics (preferred) or MCE 341 Fundamentals of Thermodynamics

Senior Year

First semester: 18 credits

- 5 ELE 443 Electronics II
- 3 ELE 586 Biomedical Electronics I or ELE 588 Biomedical Engineering I
- 1 ELE 481 Biomedical Engineering Seminar
- 3 Gen. educ. elective
- 3 Math elective
- 3 Professional elective

Senior Year

Second semester: 16 credits

- 3 ELE 587 Biomedical Electronics II or ELE 589 Biomedical Engineering II
- 1 ELE 482 Biomedical Engineering Seminar
- 3 ZOO 442 Mammalian Physiology

¹This course may be taken in the second semester of the freshman year.

- 6 Professional electives²
- 3 Free elective

Chemical Engineering

The Department of Chemical Engineering offers a curriculum leading to the Bachelor of Science (B.S.) degree in chemical engineering that is accredited by ABET³. A curriculum leading to the Bachelor of Science degree in chemical and ocean engineering (unaccredited) is offered in cooperation with the Department of Ocean Engineering (see page 62). The Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees, also offered by the department, are described in the *Graduate School Bulletin*.

Faculty: Professor Rockett, *acting chairperson*. Professors Barnett, Estrin, Knickle, Rose, and Shilling; Associate Professor Brown; Assistant Professors Bose, Gray, and Gregory; Adjunct Associate Professor DiMeglio.

The chemical engineer is concerned with the application and control of processes leading to changes in composition. These may be chemical and physical processes, and *control* refers to achieving the desired goal at reasonable cost. The processes are most frequently associated with the production of useful products (chemicals, fuels, metals, foods, pharmaceuticals, paper, plastics, and the like), but also include such seemingly unrelated matters as removal of toxic components from the blood by an artificial kidney, and modeling the flow of exhaust gases from automobiles on the highway (turbulent diffusion and heat transfer coupled with chemical change). The chemical engineer's domain includes more efficient production and use of energy, processing of wastes, and protection of the environment.

Chemical engineers have a strong foundation in chemistry, physics, mathematics and basic engineering. Chemical engineering courses include the use of digital computers, thermodynamics, transport phenomena, mass transfer operations, metallurgy, materials engineering, process dynamics and control, kinetics, and plant design. The student has the opportunity to operate small-scale equipment to determine efficiencies and operating characteristics, and to visit chemical plants in the area. Intensive work in the solution of complex problems is given in

which economics and optimization of engineering design are emphasized.

A chemical engineer with a background in both chemistry and engineering can apply his knowledge of research and development, design, production, and manufacturing not only to the areas listed earlier, but to many others such as textiles, dyes, petroleum, ceramics, paint, and rubber, as well as to biomedical, biochemical, ocean, space, nuclear energy, and environmental problems and processes.

The senior year curriculum for students majoring in chemical and ocean engineering is listed under Ocean Engineering, page 62.

Programs can be designed for those interested in special areas such as material sciences, biochemical engineering, and pollution control, and in general chemical engineering. Programs for those interested in entering dental and medical schools, or schools of business administration, can also be constructed, sometimes requiring a few courses beyond the 130 regular credits.

The major requires 130 credits.

Freshman Year

First semester: 15 credits

- 5 CHM 191 Gen. Chemistry⁴
- 1 CHE 101 Foundations of Chemical Engr.
- 3 MTH 141 Introd. Calc. with Anal. Geometry
- 6 Gen. educ. electives⁵

Freshman Year

Second semester: 15 credits

- 5 CHM 192 Gen. Chemistry⁴
- 3 MTH 142 Intermed. Calc. with Anal. Geometry
- 4 PHY 213 Elem. Physics and PHY 285 Physics Lab.
- 3 ECN 125 Elements of Economics

Sophomore Year

First semester: 17 credits

- 3 CHE 212 Chemical Process Calculations
- 4 CHM 291 Organic Chemistry
- 3 MTH 243 Calc. and Anal. Geometry of Several Variables
- 4 PHY 214 Elem. Physics and PHY 286 Physics Lab.
- 3 Gen. educ. elective⁵

Sophomore Year

Second semester: 16 credits

- 3 CHE 272 Introd. to Chemical Engineering
- 3 CHE 332 Physical Metallurgy or approved professional elective⁵
- 4 CHM 292 Organic Chemistry
- 3 ELE 220 Passive and Active Circuits
- 3 MTH 244 Differential Equations

Junior Year

First semester: 17 credits

- 3 CHE 313 Chem. Engineering Thermodynamics
- 3 CHE 347 Transfer Operations I
- 2 CHM 335 Phys. Chemistry Lab.
- 3 CHM 431 Physical Chemistry
- 3 Approved mathematics elective⁵
- 3 Gen. educ. elective⁵

Junior Year

Second semester: 16 credits

- 3 CHE 314 Chem. Engineering Thermodynamics
- 1 CHE 322 Chem. Process Analysis
- 3 CHE 348 Transfer Operations II
- 3 CHE 425 Process Dynamics and Control
- 3 CHM 432 Physical Chemistry
- 3 Gen. educ. elective⁵

Senior Year

First semester: 17 credits

- 1 CHE 328 Industrial Plants
- 2 CHE 345 Chem. Engineering Lab.
- 2 CHE 349 Transfer Operations III
- 3 CHE 351 Plant Design and Economics
- 3 CHE 464 Industrial Reaction Kinetics
- 3 PHY 341 Introd. to Modern Physics or approved professional elective
- 3 Gen. educ. elective⁵

²Select from approved list (see adviser). Professional electives approved for this program in the first semester include BCP 311, 403, 435; CHM 335, 431; CSC 311; ELE 381, 457, 581; MCE 354; MTH 244, 471; ZOO 441; in the second semester BCP 302; CHM 336, 432; CSC 311, 400; ELE 436, 444, 458, 484, 581; MCE 354; MTH 244, 472.

³Accreditation Board for Engineering and Technology through its Engineering Accreditation Commission in cooperation with the Committee on Education and Accreditation of the American Institute of Chemical Engineers.

⁴For CHM 191 and 192 (10 credits), students may substitute CHM 101, 102, 112, 114, and 212 (12 credits).

⁵In order to meet accreditation requirements, these courses, together with at least 18 credits of the general education electives, must be chosen from a group approved by the department, with the approval of the adviser designated by the department.

Senior Year*Second semester: 17 credits*

- 2 CHE 346 Chem. Engineering Lab.
- 3 CHE 352 Plant Design and Economics
- 3 Approved professional elective⁵
- 3 CVE 220 Mechanics of Materials or approved professional elective⁵
- 6 Gen. educ. electives⁵

Civil and Environmental Engineering

The Department of Civil and Environmental Engineering offers a curriculum leading to the Bachelor of Science (B.S.) degree in civil engineering and, in co-operation with the Department of Ocean Engineering, a curriculum leading to the Bachelor of Science (B.S.) degree in Civil Engineering with an ocean option. The Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees, also offered by the department, are described in the *Graduate School Bulletin*.

The Bachelor of Science program in Civil Engineering is accredited by the Accreditation Board for Engineering and Technology.

Faculty: Professor Kovacs, *chairperson*; Professors McEwen, Poon, and Silva; Associate Professor Marcus; Assistant Professors Chang, Faruque, Karamanlidis, Lee, Thiem, and Wright; Emeritus Professor Nacci; Adjunct Associate Professors Huston and Shore; Adjunct Assistant Professor Badorek.

Civil engineers are responsible for researching, developing, planning, designing, constructing, and managing many of the complex systems and facilities which are essential to our modern civilization. These include: water supply and pollution control systems; all types of transportation systems from pipelines to city streets; structural systems from residential buildings to city skyscrapers, power plants, and offshore platforms. Civil and environmental engineers play important roles in planning and administration with government agencies at all levels, especially those dealing with public works, transportation, environmental control, water supply, and energy.

The curriculum provides the students with sufficient background to pursue graduate study or to enter directly into professional practice in industry or government after graduation. The first two years are devoted largely to courses in

mathematics, chemistry, physics, and engineering science which are common to all engineering curriculums. In their last two years students have a large degree of flexibility in developing their own programs to meet their own professional goals through the selection of professional electives in environmental engineering, soil mechanics and foundations, structural engineering, and transportation and construction.

No later than the first midsemester of the junior year each student is required to file a proposed plan of study which has been approved by the faculty adviser and the department. Professional electives and general education electives must be selected in consultation with the adviser to satisfy the Accreditation Board for Engineering and Technology accreditation requirements.

Total credits required: 135.

Freshman Year*First semester: 17 or 18 credits*

- 3 CHM 101 Gen. Chemistry
- 1 CHM 102 Chemistry Lab.
- 1 EGR 102 Basic Graphics
- 3 MTH 141 Introd. Calc. with Anal. Geometry
- 3 CSC 201 Introd. to Computing I
- 3 ECN 125 Economic Principles
- 3 Gen. educ. elective or
- 4 GEL 103 Physical Geology and GEL 106 Geol. Lab.

Freshman Year*Second semester: 16 or 17 credits*

- 3 MTH 142 Intermed. Calc. with Anal. Geometry
- 3 MCE 162 Statics
- 3 PHY 213 Elementary Physics
- 1 PHY 285 Physics Lab.
- 3 Gen. educ. elective or
- 4 GEL 105 Geol. Earth Sciences and GEL 106 Geol. Lab.
- 3 Gen. educ. elective

Sophomore Year*First semester: 16 credits*

- 3 MTH 243 Calc. and Anal. Geometry
- 3 MCE 263 Dynamics
- 3 PHY 214 Elementary Physics
- 1 PHY 286 Physics Lab.
- 3 CVE 216 Metronics
- 3 Gen. educ. elective

Sophomore Year*Second semester: 15 credits*

- 3 MTH 244 Differential Equations
- 3 CVE 220 Mechanics of Materials

- 3 ELE 220 Passive and Active Circuits
- 6 Gen. educ. electives

Junior Year*First semester: 16 or 17 credits*

- 2 CVE 322 Civil Engr. Lab.⁶ or
- 3 Gen. educ. elective
- 3 MCE 354 Fluid Mechanics
- 3 CVE 352 Structural Anal. and Design I
- 4 CVE 374 Environmental Engr. II
- 4 CVE 381 Geotechnical Engr. or CVE 347 Highway Engr.

Junior Year*Second semester: 17 or 18 credits*

- 2 CVE 322 Civil Engr. Lab.⁶ or
- 3 Gen. educ. elective
- 4 CVE 347 Highway Engineering or CVE 381 Geotechnical Engr.
- 3 CVE 353 Structural Anal. and Design II
- 4 CVE 370 Hydraulic Engr.
- 3 Gen. educ. elective
- 1 CVE 304 Introd. to Professional Practice

Senior Year*First semester: 19 credits*

- 3 Approved math elective⁷
- 3 Free elective
- 3 CVE 495 Civil Engr. Systems or prof. elective
- 3 CVE 465 Analysis and Design of Concrete Structures
- 6 Professional electives
- 1 CVE 305 Introd. to Professional Practice

Senior Year*Second semester: 18 credits*

- 6 Professional electives
- 3 CVE 495 Civil Eng. Systems or professional elective
- 3 Gen. educ. elective
- 3 Approved statistics elective
- 3 Approved science elective⁸

⁵In order to meet accreditation requirements, these courses, together with at least 18 credits of the general education electives, must be chosen from a group approved by the department, with the approval of the adviser designated by the department.

⁶Students can take the lab in either the fall or spring semester.

⁷200 level or above course in mathematics. Course must be approved by adviser.

⁸Any course for which the prerequisite is met by CHM 101, GEL 103, or PHY 214 or any course in biochemistry and biophysics, biology, botany, microbiology, or zoology. Course must be approved by adviser.

Professional electives. Twelve of the fifteen required professional electives credits must be in the Civil and Environmental Engineering Department and must include at least 5 design credits. A list of courses and their design credits is available in the Civil and Environmental Engineering Department.

Computer Electronics Engineering

The Bachelor of Science (B.S.) degree in computer electronics engineering is offered by the Department of Electrical Engineering. Specialization in computer engineering is also available within the Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) programs in electrical engineering, described in the *Graduate School Bulletin*.

Faculty: Professors Jackson and Tufts, coordinators. Electrical engineering faculty.

Due to limited facilities and staff, transfers from University College to the undergraduate programs in Computer Electronics Engineering and Electrical Engineering will be limited to a total of 90.

Applications for transfer to the College of Engineering will be considered in June for students who wish to be admitted for the following fall semester. Students must complete transfer applications in University College and submit them to the Associate Dean of Engineering by May 1. Admissions will be considered by the Associate Dean, in consultation with the Undergraduate Affairs Committee in Electrical Engineering. Admission decisions will be based on cumulative quality point averages in MTH 141, 142; PHY 213, 285; CHM 101, and CSC 201. Students with quality point averages of less than 2.5 in these courses are advised that there is little chance for admission to Electrical Engineering or Computer Electronics Engineering.

The Department of Electrical Engineering will no longer admit students into its sophomore courses who have not been formally admitted into Electrical Engineering or Computer Electronics Engineering.

Computers and computer-like devices have transformed society, particularly in the technologically advanced countries. Computers are usually associated with data processing and high technology

control and signal processing functions such as numerical controlled machine tooling, computer-aided machine design, tomography and medical imaging, speech analysis and synthesis, and picture and data communication. Both mini- and microcomputers now play an important role in our everyday work and play environment. Word processing, paperless offices, and microprocessor-controlled games are prominent examples.

Computer engineering is concerned with the design and efficient use of large or small computers and the development of other machines and instruments which contain computers, or parts of computers, as essential building blocks, from the hand-held calculator to the large multi-terminal computer, and the programmable assembly machine. A programmable machine is one which will change its operation in response to a program or command.

Computer engineers may be employed in the design, service, operation, and sale of computer systems as well as the design, service and sale of complex machinery, instruments, and systems — such as an automated subway — which require computers as essential parts. The employers may be industrial organizations, transportation companies, federal laboratories, or local government.

The computer engineer must understand the fundamentals of computer logic and programming as well as the fundamentals of electronics and general engineering — mathematics, mechanics, electricity, magnetism, and heat transfer. Engineers use all of this knowledge to create new devices and systems which satisfy perceived human needs.

For transfer from the University College to the College of Engineering in the Computer Engineering program students must have completed *all science, mathematics, and engineering courses required during the first two semesters* (see below) with a grade average of C or better.

The major requires 129 credits.

Freshman Year

First semester: 17 credits

- 3 CSC 201 Introd. to Computing I
- 3 CHM 101 Gen. Chem. Lecture I
- 1 CHM 102 Lab. for Chemistry I
- 3 MTH 141 Introd. Calc. with Anal. Geometry
- 3 ECN 125 Economic Principles
- 1 EGR 102 Basic Graphics
- 3 Elective

Freshman Year

Second semester: 16 credits

- 3 PHY 213 Elem. Physics I
- 1 PHY 285 Lab. for Physics I
- 3 MTH 142 Intermed. Calc. with Anal. Geometry
- 3 CSC 202 Introd. to Computing II
- 6 Electives

Sophomore Year

First semester: 16 credits

- 3 ELE 211 Linear Systems and Circuit Theory II
- 3 ELE 210 Introd. to Elec. and Magnetism
- 1 ELE 214 Introd. Elec. Engineering Lab.
- 3 MTH 243 Calculus and Anal. Geometry
- 6 Electives

Sophomore Year

Second semester: 15 credits

- 3 ELE 205 Microprocessor Lab.
- 3 ELE 212 Linear Systems and Circuit Theory II
- 3 MTH 362 Adv. Engr. Math. I
- 3 PHY 341 Modern Physics I
- 3 CSC 311 Machine & Assem. Lang. Programming

Junior Year

First semester: 16 credits

- 4 ELE 313 Linear Systems
- 3 ELE 322 Electromag. Fields I
- 3 ELE 331 Elec. Engr. Materials
- 3 MTH 363 Adv. Engineering Math. II
- 3 Elective

Junior Year

Second semester: 16 credits

- 3 ELE 314 Linear Systems and Signals
- 4 ELE 342 Electronics I
- 9 Electives

Senior Year

First semester: 17 credits

- 5 ELE 443 Electronics II
- 6 Professional electives
- 3 IME 411 Engr. Statistics I
- 3 MTH elective

Senior Year

Second semester: 16 credits

- 3 ELE 405 Digital Computer Design
- 4 ELE 444 Electronics III
- 3 Professional elective
- 6 Electives